An External Review of SciDev.Net: the company and its website

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by

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Summary

S1. This report describes the findings of a review of SciDev.Net that was commissioned by the organisation's trustees with funds from the Department For International Development.

S2. The review is based on evidence gathered from actual and potential users of the website, www.SciDev.Net and from interviews and documents from key informants including funders, staff of the organisation[1], and trustees.

S3. The review shows that SciDev.Net provides a very useful service to a wide range of people in both developed and developing countries. It is highly valued by those who use it, particularly for news about science and development. SciDev.Net remains an innovative idea, with few direct competitors, and the team has done well to build the readership and a reputation for quality and reliability. There is a strong demand for that service should continue. Those development agencies who took the risk of funding the SciDev.Net at the initial experimental stage should feel well satisfied with what has been achieved. The results achieved so far provide strong justification for continued funding in future.

S4. During the next phase SciDev.Net will need to expand its readership considerably, both in terms of absolute numbers but also in terms of the characteristics and diversity of the audience This will require expanding the audience in Africa (and the poorer parts of South and South East Asia), and expanding the particular audience segment comprising with policy makers and analysts.

S5. There is a strong demand from the actual and potential audience for more 'interactivity' both within 'communities of practice' and with SciDev.Net itself. There is also a demand for more local content, both in terms of material from the readers and material about their particular countries and interests.

S6. SciDev.Net's 'news products' are highly valued. This is less so for the more in-depth material, such as the 'dossiers'. Products for the audience segment associated with policy makers and analysts have yet to develop a form that meets their needs in large numbers. This market segment and the products associated with it need to be thought through from first principles.

S7. The expansion of SciDev.Net during the next phase is likely to require a more 'distributed' model with responsibilities delegated away from the central office in London, while at the same time strengthening systems to assure quality.

S8. Expansion is also likely to require closer cooperation with other organisations, possibly in the form of 'strategic alliances' both to share the burden of the many tasks that need to be performed, and to enhance the credibility of SciDev.Net by association with other credible organisations.

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[1] The author would like to thank the assistance of many people who helped to make this review possible, including the staff at SciDev.Net who provided a great deal of material and answered large numbers of questions. Gareth Williams provided major contributions to the report through the telephone interviews and analysis of the on-line questionnaire. Any errors that remain are of course the responsibility of the author alone.

S9. The findings of this review suggest that SciDev.Net's track record and the importance of the services it provides form a strong justification for future funding and continued support by funding agencies and other sponsors.

1 Introduction

Terms of Reference

1. This report was commissioned by the trustees to review the Science and Development Network (SciDev.Net). The review is to cover the company and its website, www.SciDev.Net. Funds were provided by the UK Department for International Development.

2. In summary the main purposes of the review are :

- *To evaluate whether the grants awarded to SciDev.Net since 2001 been used effectively and for the purposes for which they were awarded;*
- *To assess how far the organisation has achieved the broad objectives identified in its original business plan and in its Strategic Plan for 2004-2008;*
- *To indicate actions that may be required to increase the prospects for SciDev.Net's financial sustainability;*
- *To identify SciDev.Net's opportunities for future growth and for increasing its contribution to development goals*[2].

3. The report seeks to provide the trustees of the organisation with a broad overview of its current strengths and weakness, as well as potential opportunities for growth and development, as a basis for planning future strategy;

4. The trustees identified a long list of questions that they would like answered, and from this they compiled a shorter list of approximately 50 'Key Questions'. In this report these key questions are grouped appropriately into five chapters, based on four themes identified in the terms of reference and a fifth concerned with management and governance. The full terms of reference and list of key questions are provided at Annex 1.

What is SciDev.Net? – the essential features

5. SciDev.Net's strategic plan for 2004-2008 states that

- *The aim of SciDev.Net is to enhance the provision of reliable and authoritative information on issues related to science and science-based technology that impact on economic and social development, in order to help both individuals and organisations in the developing world to make informed decisions on these issues and their impact on society.*
- *[SciDev.Net seeks] to achieve this primarily by operating a free-access website (www.SciDev.Net) that provides news, views and information on science, technology and the developing world. The website includes policy-oriented 'dossiers' on key issues at the interface between science, technology and development, as well as regional 'gateways' that provide regional news and perspectives on these issues.*

[2] See Annex 1.

6. SciDev.Net was the idea of its current Director, the award-winning science writer David Dickson previously with 'Nature'. It was started in 2001. Support was provided at the outset from the subscription-only scientific journals, Science and Nature. These two journals provide SciDev.Net with free access to relevant articles[3]. Support was also provided at the outset by TWAS, The Academy of Sciences for the Developing World (http://www.twas.org).

7. SciDev.Net now has a staff of ten in an office in London and a further three regional co-ordinators working part time (supported by a further four regional consultants, also part time). In addition each of the 12 "dossiers" is managed by six free-lance individuals working part-time, and approximately 131 freelance "stringers" from around the developing world (who are paid only if their material is used). Currently, SciDev.Net carries between 45 and 65 news articles (including brief news items) each month. About 90 per cent of these are original items prepared by staff members or the freelance journalists, the remaining being reproduced from other sources (in particular Nature and Science). The site now provides region-specific information through six 'Regional Gateways', which also provides some text (particularly headlines) in Spanish, Portuguese, and Chinese, although most of the text is in English. The number of people who have ever registered on the web site is approximately 25,500, of whom over 60% are from developing countries (16% of the total from Sub Saharan Africa).

8. SciDev.Net is core funded by four donors (DFID, IDRC, Sida, The Rockefeller Foundation) and currently has an annual expenditure of £735,000. Small amounts of additional finance are provided by organisations that fund specific tasks, such as a workshop or a dossier. The approximate contributions for 2006 in sterling are as shown in the following table. Currently SciDev.net faces a considerable short-fall for 2007.

	2006	%
Sida	£260,000	*35*
Dfid	£250,000	*33*
IDRC	£119,000	*16*
Rockefeller	£119,000	*16*
Approx Total	£748,000	*100*

9. SciDev.Net is a charity registered in the UK, and is governed by a board of twelve trustees (2 from UK, 7 from developing countries including two from Africa) that meets once a year. Executive powers are delegated to the Director, and an executive committee made up of trustees which convenes quarterly (if necessary electronically).

The methods used for the review

10. The approach adopted by the reviewers was largely specified by the client. These included

[3] While mention of this link is made in the section of the web concerned with donors and supporters, somewhat surprisingly it is no longer flagged prominently on the Home Page of the site.

- *An online questionnaire of users of the SciDev.Net website* ***(henceforth OQ)***. This questionnaire was largely prepared and run by the staff of SciDev.Net, with comments on the questions provided by The Policy Practice. The analysis of the questionnaire was undertaken by Gareth Williams of the Policy Practice and the summary report is provided at Annex 5. The questionnaire was answered by 2,213 respondents, in some cases partially, but in most instances nearly all the questions were completed. In addition to quantitative information derived from multiple choice questions, the questionnaire produced over 200 pages of text in answer to the large number of open ended questions.

- *A series of key informant interviews* ***(henceforth KI)***. Some thirty-two face to face or telephone interviews were carried out with key staff at SciDev.Net, a sample of trustees, donors, and other key informants such as key policy analysts (particularly in Africa) and knowledge brokers in the development sector. A full list of interviewees is provided at annex 3. The interviews were conducted by Andrew Barnett, the team leader.

- *A series of "focus groups"* ***(henceforth FG)***. Fifteen to thirty people were brought together for a day long meeting in South Africa, Uganda (2), India, China and Ecuador (2). The participants were selected to reflect both actual users and potential users, and a variety of audiences (scientists, policy analysts, NGO, the private sector etc). The groups were organised by local specialists not previously associated with SciDev.Net, except in the case of China where the group was organised and facilitated by SciDev.Net's regional co-ordinator. Summaries of the results are provided at Annexes 7-11.

- *A series of telephone interviews* ***(henceforth TI)***. Thirty interviews were undertaken by telephone, drawn from a sample of users and 'potential' users of the site from both developed and developing countries and were selected to complement the results of the focus groups. They were carried out by Gareth Williams. A summary report is provided at Annex 6.

- *A review of documents supplied by SciDev.Net and other organisations.* The most important of these are listed at Annex 4.

11. The Policy Practice also convened an internal Advisory Group. This group met at the outset of the review to advise on the issues and the approach, and provided comments on the first draft report. The Advisory Group consists of

- Dr Erik Arnold, founding director of Technopolis Limited, one of Europe's leading analysts of research impact and policy.

- Carol Priestley, former Director of the International Network for the Availability of Scientific Publications (INASP), which provides capacity building and improve access to scientific and scholarly information to emerging and developing countries.).

- Professor Alex Duncan, development political economist specialising in Africa.

Caveat – difficulties of interpretation

12. The normal caveats apply to the interpretation of these data. While the samples were selected to provide the greatest insight, and were balanced in terms of geographical area and type of audience, they were relatively small in relation to the actual readership of SciDev.Net. The online questionnaire sample represented 10% of users and the results are therefore statistically significant. The telephone interviews and focus groups were also broadly indicative. The focus groups provide user opinions rather than incontrovertible evidence but are useful in raising issues for the staff to consider. There were examples of conflicting opinions (particularly about the value of SciDev.Net news and about the usefulness of the dossiers). But the high degree of convergence in many of the views expressed gives us considerable confidence in our findings.

13. Nonetheless the data do have to be treated with care. For instance, although the number of people responding to the on-line questionnaire was high relative to questionnaires of this type, those that responded are a self selecting group (for instance, highly motivated readers, or people with time on their hands). But more importantly, it appears that many respondents, even users of the SciDev.Net services, did not know the service very well and the opinion of a significant number of respondents appeared to be based on their impression or expectations rather than the reality of the site's content. This and other issues of interpretation are discussed more fully in the appropriate section.

14. The objective of this report is to identify and summarise the main clusters and trends in the evidence, rather than to report every nuance of it. This is inevitably a subjective process. All the evidence is contained in the annexes, except the key informant information and evidence taken from the document review. Few readers will wish to trawl through all the evidence contained, but it is recommended that SciDev.Net staff do read all the reports and draw on the many details that are likely to be useful in guiding and improving their future activities.

2 A broad overview of SciDev.Net's current strengths, weakness and opportunities for growth and development.

Overall Impressions

15. SciDev.Net provides a very useful service to a wide range people in both developed and developing countries. It is highly valued by those who use it, particularly for news about science and development[4]. SciDev.Net remains an innovative idea, with few direct competitors, and the team has done well to build the readership and a reputation for quality and reliability. There is a strong demand that the service should continue. Those donors that took the risk of funding the SciDev.Net at the experimental stage should feel well satisfied with what has been achieved. And the results achieved so far provide strong justification for continued funding.

16. Issues of science, technology and development appear again to be rising up the policy agenda, even in Africa. And it seems likely that SciDev.Net has contributed to the raising the profile of these issues. Certainly the scientific and technological context in which developing countries operated is changing rapidly. This means that there is a lot more to do, many more actors are becoming involved, both as competitors to SciDev.Net but also as allies. DFID's latest White Paper foresees a doubling in funding for S&T research. The donors, and many Africans, stressed the importance of SciDev.Net adapting to this new and changing situation.

17. There is a widespread impression that now that SciDev.Net is well established it needs to 'move up into the next gear' and expand the readership, particularly in key segments of the audience, and to improve the quality[5] (and possibly the range) of services it provides to them. During the next phase the original idea needs to evolve into a more sustainable organisation.

18. Much of this report and many of the opinions provided to the reviewers, are about how to make a good service better. Many areas of concern are already well known to SciDev.Net's management and trustees. In most cases the question is what to do about them, and in some cases why have they not been tackled sooner. Part of the answer is undoubtedly that SciDev is a small and young organisation and cannot be expected to do everything at once. This in turn means that SciDev.Net management, trustees and funders need to develop a common set of objectives about where they want the organisation to go in the next phase, and to take a strategic view as to where to place its limited resources and future investment to achieve these objectives.

19. The review attempted to canvass a wide range of opinions from the users, potential users and supporters of SciDev.Net. There was a considerable clustering of opinions.

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[4] The terms 'science', technology, innovation, and development are used interchangeably throughout this report as a short-hand to describe the area of SciDev.Net's focus. There is of course a danger in this, particularly as a number of respondents wanted greater clarity on these terms and most certainly wanted more than just 'science' or even specific sub-sets of 'science'.

[5]. Evidence on this and other points in this over view chapter are provided in subsequent chapters.

These clusters will be identified and elaborated in more detail in the subsequent chapters. But the top five issues would appear to be:

- SciDev.Net is a highly and widely valued as a source of news about science, technology and development[6], and numbers continue to increase;
- Concerns about the value of the dossiers' and, more generally, SciDev.Net's ability to meet the needs of that segment of the audience made up of policy makers and policy analysts;
- An impression of excessive "northern dominance" ;
- A desire for more 'interaction' with people from developing countries and the coverage of the 'local' issues that concern them;
- A widespread ignorance of SciDev.Net and the services that it can offer – suggesting a need for a much more vigorous marketing effort to the key audiences (probably in Africa and amongst policy analysts).

20. An important finding of the review was that views about SciDev.Net often were based more on impressions and expectations rather than on the actual content. Frequently critics appeared to make their judgements before they had examined the content. In particular while most of the audience felt that SciDev.Net was credible as a source of news, a significant proportion felt that it was "unlikely" to be a credible source of information for policy makers and analysts. There is clearly much that SciDev.Net must and can do to bridge this credibility gap.

21. It was also found that a great many people accessed the website solely through the e-mail "alerts". They valued this service, but a consequence is that they rarely visited those parts of the site that are not frequently referred to in the weekly email, and rarely entered it through the Regional Gateways. Many of the features of the site were therefore not known to users, particularly the quality assurance mechanisms (such as advisory groups) that had been put in place.

Strengths

22. The overwhelming majority of respondents was delighted with the 'news' elements of SciDev.Net The combination of short news pieces, and longer features, editorials and opinion pieces makes the website interesting. Respondents regarded the site as innovative, and having played an important role in raising the visibility of science, technology and development generally. As one key informant remarked, "this is not an easy job and they do it very well indeed".

23. It would appear that SciDev.Net has developed a Unique Selling Point associated with its brand and the ability of its staff and stringers to write clearly about science in a way that is both popular and authoritative. This is a major asset that can be exploited in future to achieve greater impact and as the basis for forming strategic alliances with scientific and other organisations.

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[6] The only exception to this was apparently in India where the focus group saw SciDev.Net's news as a competitor rather than a source.

24. Despite the rising competition, SciDev.Net appears to be one of the few news media, perhaps the only one, to occupy this area of science, technology and the interaction with 'development'. It is well on the way to being the site of first choice for this type of information in some parts of the world. As one potential competitor, also supported by DFID, said "SciDev.Net gets to places that we do not".

25. Visitor numbers are building up steadily, with nearly two thirds being in developing countries.

26. SciDev.Net has a young and enthusiastic staff, and has developed a network of advisors, consultants and stringers spread across the developing world. This is a considerable asset and provides a firm platform on which to build.

Weaknesses

27. One of the main concerns clusters around the need to deal more effectively with the science and technology policy audience in general and the role of dossiers in particular. Concerns about the dossiers were by no means universally held, and there was strong support for the dossiers from some quarters. But this is an area that Management has already identified as an area for improvement and re-focussing and it has taken action in recent months in this direction.

28. It may be thought that if SciDev.Net deals so effectively with 'science news' why should it be concerned with other products for this segment of the audience – even policy makers and analysts already benefit from SciDev.Net's news products. Added to this is the view that the world is already over crowded with large numbers of other organisations providing communications products targeted at policy makers and analysts in both developed and developing countries.

29. These issues will be addressed more fully in the next chapter. But two points need to be made at the outset. First, that while there may appear to be many actors in this field, it seems that SciDev.Net's association with 'credible science' and the interface with 'development' gives it a distinct angle not shared by its competitors[7]. And second, policy makers and analysts are one important segment of the audience through which SciDev.Net can most easily demonstrate to its financial supporters that it has a "development impact"[8].

30. The second widely expressed concern was that SciDev.Net gives the impression of being a 'northern-dominated' organisation[9]. This view was expressed in a number of different ways both by key informants (including donors) and by the focus groups. As one person said, "I am disappointed that SciDev.Net has not taken root in Africa". Although stories from the developing world might be said to dominate the website, the editorials and many of the opinion pieces were perceived to be by predominantly 'northern' writers[10].

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[7] A dossier on HIV produced by SciDev.Net, can be (and probably is) perceived as being quite different from one produced by ELDIS at IDS, and indeed one produced by WHO.

[8] In principle a similar issue arises with producing communications products that meet the needs of teachers and school children. These are all part of a more general issue of providing specific communications products that best meet the needs of particular segments of the audience.

[9] These views were expressed in many ways but focussed on the need for much more "local content" and more delegated responsibilities (see paragraphs 104 and following).

[10] While this view was widely held, Scidev.net point out that currently about two thirds of opinion piece authors are from developing countries.

There was a strong 'user need' for more 'southern' voices and opinions. Part of this concern was manifested by the many respondents who felt that SciDev.Net's communication was "largely one way". Respondents seemed largely unsatisfied by, or were largely unaware of, mechanisms that have already been put in place to counter this impression, such as the regional advisory groups, regional gateways, and in-country stringers.

31. The apparent lack of 'interactivity', locally generated content and local ownership was also seen as part of a wider lack of willingness for "genuine collaboration" and partnership. SciDev.Net has, however, made many attempts to establish partnerships. Some have been successful, such as those with Nature and Science. But it appears that many others have not yet come to full fruition. Some of these approaches for partnership were interpreted as "selling the SciDev.Net idea" rather than seeking areas of mutual interest. One key informant said in this context that while "SciDev.Net was concerned with capacity development, it is not networking".

32. But at the heart of the issues of partnership, interaction, local content, and 'Southern ownership' would appear to be the issues of 'control', editorial independence and quality assurance. These are important issues for SciDev.Net and the future credibility of its brand. As one experienced key informant explained "Partnerships add complexity and undermine quality".

33. These issues need to be addressed as a matter of priority as Scidev.Net proceeds to the next stage of development. SciDev.Net cannot do everything, and will need to share the burden through the formation of 'strategic alliances[11]' with other people and organisations to achieve their common interests. In some cases these alliances will be required to increase depth and substance and overcome the credibility gap that SciDev.Net is experiencing with certain audiences. Suggestions are also made in the subsequent chapters about ways of delegating certain responsibilities without jeopardising the quality of the SciDev.Net "brand".

34. While the size of SciDev.Net's audience can be seen as a strength, there is nonetheless widespread ignorance of SciDev.Net and the services that it can offer. Most of the focus groups felt that much more needed to be done to market the site. The funders also felt that the problem now was less about increasing absolute numbers of readers, but in focussing on specific audiences, particularly in Africa and amongst policy makers and analysts more generally.

Opportunities for growth and development

35. There appear to be a wide range of opportunities for growth and development of SciDev.Net. Critical choices now face SciDev.Net and these are identified and explored in subsequent chapters.

36. Donor funding appears to be the most promising source of future funding, but it will be important to demonstrate to donors that other avenues of funding are being explored,

[11] The term "partnership" is given so many interpretations to be almost meaningless. Originally the term implied or assumed a degree of equality between the partners. Probably a better word in this context is a "coalition" which the Concise Oxford Dictionary defines as "a temporary alliance for combined action". An alternative phrase with the same meaning is a "strategic alliance".

particularly web based advertising and the expansion of sponsorship of particular services (dossiers, workshop etc).

37. In addition there would appear to be a number of steps that SciDev.Net could take to make it easier for donors to fund it. This does not necessarily mean changing policy ("becoming donor driven"), but providing donors with more information, properly packaged in the way that they need, and at the right time.

38. Strong opinions were also expressed by some respondents about getting the richer parts of the audience to pay for SciDev.Net's services. Certainly the donors remain convinced of the importance of delivering a free service to people and organisations who cannot pay. But at the same time, they are reluctant to see 'their funds' being used to subsidise those with an ability to pay. Although differentiating the services between payers and non-payers would appear relatively simple with a web-based product, other sources of finance are likely to be more cost effective[12]. However, SciDev.Net needs to be able to show these stakeholders that this market has been explored seriously.

39. There would appear to be opportunities to increase specific parts of the audience significantly. Certainly there is still a largely untapped audience that wants the services associated with news and comment within SciDev.Net's operational space (science, technology, innovation that 'that impact on economic and social development'). The main point is that the cost per registrant (currently about £30 per year) would appear to be far too high and it needs to be reduced by getting many more users.

40. It would also appear that there is a considerable opportunity to market SciDev.Net services to the audience of policy makers and analysts. This will involve finding out who these people are (for instance through data mining on the web and through identification of the existing "communities of practice") and providing them with the communications products that they want.

41. An 'evolutionary' approach to product development (testing new communication products and services and adapting them in the light of experience and feed back) is likely to be required. Such expansion is also likely to require new strategic alliances. These are likely to build on SciDev.Net's ability to supply well written communications products on science and technology to those organisations that need these services and already are regarded as credible to the target audience.

[12] See paragraph 215 for a concrete example of how this country level authentication has been achieved.

3 Assess whether the grants have been used effectively.

Reach and users

Who uses SciDev.Net?

42. The current breakdown of registered users by profession is shown in the following table together with the somewhat similar breakdown of the people who participated in the online survey.

	Registrants		Online Survey	
Profession	As of 17-Jul-06	Percentage	Percentage	Rank
Researcher (science)	4348	18.24	19.20%	1
Other	3328	13.96	10.40%	3
University teacher	2730	11.46	15.00%	2
Consultant	1638	6.87	5.60%	6
University student	1607	6.74	4.00%	11
Journalist	1482	6.22	6.30%	5
Graduate student	1452	6.09	4.10%	10
Government official	1285	5.39	6.30%	4
NGO official	1171	4.91	5.30%	7
Researcher (policy)	891	3.74	5.00%	8
Physician	812	3.41	2.80%	12
Research administrator	614	2.58	2.40%	13
Science communicator	609	2.56	5.00%	9
Librarian	493	2.07	2.20%	14
Industrial manager	396	1.66	0.90%	18
School teacher	335	1.41	1.40%	17
Aid agency official	322	1.35	1.70%	16
School student	319	1.34	0.50%	19
Sub Total	23832	100		
No profession stated	182		1.90%	15
Total Registrant	24014		(N=2213)	

43. The number of registrants probably overstates the actual membership as the process for removing lapsed users or duplicates from the registrants data base is limited[13]. Perhaps more importantly for what follows, it is clear from the focus group and other interviews that a number of these categories overlap[14], and that individuals may well perform many different tasks, for instance sciences researchers may well provide policy analysis for ministers from time to time, will teach, may work for an NGO, act as a consultant and so on.

44. However the readership is probably higher than the number of registrants as anyone can access the website without being registered. For instance about 10% of the questionnaire respondents were not registered. Many readers come to particular articles

[13] However the monthly reports do have a figure for “unregistrations”, but these are usually quite low – 50 a month or so.

[14] While many individuals certainly perform many roles, SciDev.Net’s registration form (rightly) only allows registrants to tick one box for professional category.

from web searchers such as Google[15] . Furthermore the telephone interviews made it clear that numerous interviewees reported that they forward the weekly email alerts or particular stories widely amongst colleagues[16]. And again many organisations reported that their organisations draw on materials from the SciDev.Net website and disseminate in their own media and publications.

45. Although readership data are notoriously unreliable and difficult to interpret, SciDev.Net's current readership is indicated by the following table:

Visitor Summary	Nov	Dec	Jan	Feb	Mar	April 2006
Number of visits	97,422	74,860	92,779	98,776	104,279	**93,493**
Number of page views	245,991	199,950	242,972	258,776	274,913	**247,020**
Page views per visit	2.53	2.67	2.62	2.61	2.64	**2.64**
Data supplied by SciDev.Net						

46. Other institutions compile their readership data in slightly different ways, but the following usage data from two other British-based communication services who are targeting policy makers and analysts are provided for comparison. However it must be stressed that *these data are not directly comparable and should be treated as indicative*.

ODI Visitor Summary[17]	
Number of visits (Monthly average 2005/6)	**81,813**
Number of downloads per month (June 2006)	163,250.

IDS Visitor Summary[18]						
Id21 Visitor Summary	Nov	Dec	Jan	Feb	Mar	April
Number of visits	28,953	22,788	27,391	29,153	31,466	29,684
Number of page views	88,781	65,081	70,141	71,958	95,668	76,602
Page views per visit	3.07	2.86	2.56	2.47	3.04	2.58

[15] In March 2006 for instance some 42,594 visits to the site came via Google, with a further 23,334 coming directly to the site. Considerably fewer visitors came through the third most frequently used source, namely Yahoo at 5,806.

[16] In the World Bank for example the weekly email is circulated to around 500 staff members including around 100 at senior level.

[17] ODI, personal communication

[18] IDS personal communication. IDS stress that these are very rough numbers and should not be used for direct comparisons as the method of counting is unlikely to be identical across the three sources of information.

Eldis Visitor Summary	Nov	Dec	Jan	Feb	Mar	April
Number of visits (140,000 "visitors" in March 2006)	241,342	184,409	217,385	224,044	250,112	201,672
Number of page views	660,576	501,758	618,187	595,589	709,893	570,152
Page views per visit	2.74	2.72	2.84	2.66	2.84	2.83

47. Although there is some question about their validity, SciDev.Net does particularly well in terms of the Google Web 'PageRank' system with a score of 8/10[19]. This is the same as DFID, but better than IDS and ODI (at 7/10). The World Bank site scores 9/10.

48. This suggests that SciDev.Net has made major achievements and it is getting broadly similar results to those of ODI, but considerably less than those of IDS. However neither of these organisations aspire to communicate to as wide an audience as SciDev.Net. In this context SciDev.Net's 25,000 registered users appears to be modest and represents a cost per registrant of about £30 per user per year. Currently registrations are creeping up by 500-600 a month. However the overall target was set to increase by only 3,000 additional registrants a year in the 2004-2008 Strategic Plan[20].

49. The next phase is likely to require a stepped change, with targets in the tens, if not hundreds, of thousands so as to become known globally as a source of news on science and development[21].

Are the actual users the target users?

50. SciDev.Net's Strategic Plan states that

> *Our target audience is the broad range of individuals with a professional or personal interest in the interaction between science, science-based technology and development. These include those working in universities and other training institutions, research laboratories, government and aid agencies, the media, diplomatic missions, the private sector, civil society and policy research organisations…… We are, however, principally interested in reaching users in the developing world. (see paragraph 2.1 and 2.2.*

51. The idea of a "target audience" is complex. SciDev.Net's longstanding view is that they in effect face "a single audience", with a number of separate components (such as those listed in paragraph 40). The director states that " *I look at 'the audience' as the total readership of SciDev.Net, and therefore as a community of users that is more than just the sum of its component parts*". For instance, he argues that "*Science journalists and policy makers are not two independent target groups; we target journalists partly in order to*

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[19] "In essence, Google interprets a link from page A to page B as a vote, by page A, for page B. But, Google looks at more than the sheer volume of votes, or links a page receives; it also analyzes the page that casts the vote. Votes cast by pages that are themselves "important" weigh more heavily and help to make other pages "important." http://www.google.com/technology/

[20] It has been pointed out that these targets have now been revised and are currently set at 7,500 additional registrants per year.

[21] The New Scientist on-line services states that it has 1.6 million unique readers. – personal communication Lara Schonberger, New Scientist On-line account manger.

access policy makers, on the grounds that many policy makers learn as much about science through what they read in the press as they do from experts' reports".

52. It may be seen as a quibble to distinguish between a component of a single audience and different audience segments. But it becomes critically important when it leads to the view that the same communications product, such as the dossier, is useful to the 'junior government advisor' and to the 'University Teacher'. SciDev.Net aspires *to provide a 'single product' that appeals in different ways to a range of audiences – in the same way that the New Scientist or the Economist does. It is 'peer to non-peer' communication that both 'educates politicians' and acts as a source of information for researchers and science communicators. The purpose is to 'embed science in the development discourse'"*.

53. While there may be justification in these arguments, it would appear from the focus groups and other evidence that some of the products produced by SciDev.Net do not adequately meet the needs of some segments of the audience. This theme runs through much of the evidence and therefore much of the rest of this report.

54. This leads to an initial hypothesis that will be explored and supported in subsequent sections of the report. This is that clearer "segmentation" of the audience, and more effective generation of products that meet the specific needs of these different segments would provide the analytical basis of an effective strategy as SciDev.Net moves into its next phase. In particular such segmentation would simplify the task of "engaging" (interacting) more effectively with one or more of the different audiences. Failure to do this sufficiently is the past provides a plausible explanation for a cluster of user concerns.

55. These issues of market segmentation are common in communication strategies and similar issues were raised by the earlier review of the dossiers. For instance, this earlier report noted that

> *The interviewees were asked whether SciDev.Net should continue with its current strategy of providing content in the same fashion for all audience segments (such as policy makers, journalists, and academics) or whether it would be more appropriate to tailor the material for different audiences.*
>
> *Users are divided on the issue of 'one-size-fits-all' versus a stratified approach to presenting content for different audiences. Some interviewees (13) feel that a general, topic-based approach is best, as this is how they would seek information. But an almost equal number of interviewees (10) expressed a strong view that it would be better to have separate sections.*[22]

56. The idea of segmentation was also raised in all of the focus groups. For instance the convenor of the focus group in China said that if he had to sum up his experience of the Focus group in one sentence, "I'd say much more efforts should be made to distinguish the different target readers (journalists, scientists, and policy researchers)"[23].

57. SciDev.Net has already begun to segment its audience by geographical areas through the Regional Gateways). Although the evidence suggests that the gateways are not much used, and most users like to see the whole website. The issue is probably less about

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[22] Grové Steyn, Tamar Kahn, and Alister Scott SciDev.Net Dossier Consultation, Final Report, 5 May 2003, paragraph 4.3.5.

[23] Personal communication.

splitting up the site for different audiences, and more about being clearer about the targets for particular products (such as dossiers).

58. The issues of "engagement" between the suppliers of knowledge and the users of knowledge (in this case the audience) is also a long standing theme in the literature both on communication and on innovation[24], particularly with regard to the audience of policy makers. For instance DFID's Research Policy Paper of 2002 noted that

> *'User engagement',[is important] both to determine research needs, but also to facilitate up-take. Locating 'research' in the wider context of 'knowledge systems' makes clear the necessity for the 'supply side' of the system to engage continuously with 'users' of research in order to understand who they are, how they are differentiated, and what their needs are. Paragraph 254 Nov 2002.*

59. At the time of that report it is was probably fair to describe the situation as one key informant did that

> *research institutes generally have an extraordinarily vague notion of who those users are, and how they regard and deploy research. There is a great deal of loose talk about 'reaching policy makers', but how it actually happens in practice is for most a distinctly grey area.*

60. But since then a considerable amount of research has emerged on the way that research-based knowledge influences the policy process. When asked to summarise the conclusions of this research, one leading specialist said "The key to linking research to policy is to 'engage' with policy makers".

61. While such research focuses on the engagement between researchers and policy makers, there is strong reason to believe that the same applies to those that seek to facilitate communication between the former and the latter.

62. At a brainstorming session with the Dossier Coordinators the idea emerged that SciDev.Net's audiences and products could usefully be considered as Rubik cube (see next page). While all segments of the audience might find elements of each product of some value, it seems likely that each audience segments has different skill levels and different information needs.

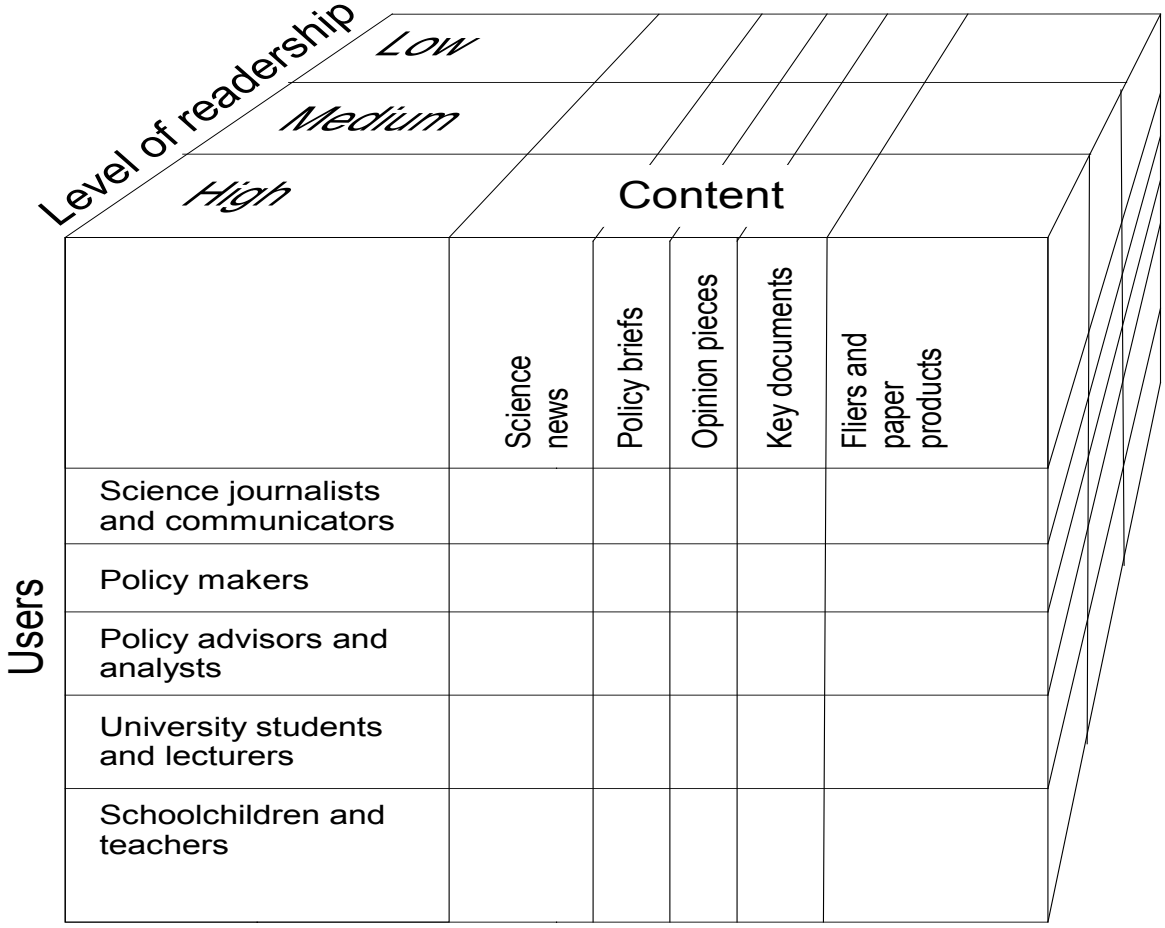
Has SciDev.Net reached its target users?

63. The evidence provided by the user data, on-line survey and the focus groups suggest that SciDev.Net has indeed reached an increasingly large audience, and has established a good reputation as a key site, and possibly *the* key site, for news about science and development. It is also a major achievement that over 60% of SciDev.Net's registrants are from developing countries.

64. However as suggested earlier, the numbers are still modest relative to other services (see paragraph 48). Some key informants (including a trustee) suggested that web-based products often show dramatic and exponential growth and anything less than this is disappointing. It is certainly the case the numbers of people in developing countries who fall into each of the market segments is vast (for instance India alone has more than 250

[24] These ideas are summarised in the recent publication of the Danish Ministry of Foreign Affairs: **Partnership at the Leading Edge: A Danish Vision for Knowledge, Research and Development** (April 2001), particularly page 279 *Some New Ideas About Research for Development,* by Erik Arnold and Martin Bell.

universities which catered last year for more than 3.2 million science students, though India only awarded 5,000 PhD in Science each year[25]. This is not to mention the numbers in China, or the number of English reading science students at school and university in the wider developing world)[26].



65. But in addition to concerns about the absolute numbers of readers, there is also a concern about the characteristics of the readership. This has two forms: first is the concern, expressed by two of the donors to SciDev.Net, about the geographical distribution of the readership and their socio-economic status. While the donors agree that it has been important for SciDev.Net to build up its user numbers, they support SciDev.Net because of its ability to communicate with people who could not afford to obtain this type of information at the full commercial price. In particular they are concerned to increase the readership in sub-Saharan Africa.

[25] New Scientist Special Issue February 2005.

[26] Few respondents in the telephone interviews were able to estimate the potential market size, but one stated that *there were around 250,000 scientific researchers in Latin America, of which around 20% are interested in policy. On the basis of the number of registered users of SciDev.Net in Latin America, this may represent about 10% of the potential audience in Latin America*.

66. Again these issues of audience are complex. There are of course more people in poverty in India and China than in Africa. And, as any discussion of the impact of infrastructural services concludes, it is difficult to differentiate between trying to impact poor people directly and the need to impact those people who may be relatively rich but whose actions can contribute indirectly to poverty reduction such as through economic growth and the redistribution of resources through taxation.

67. Some 16% of the total readership is from Sub Saharan Africa and this is an achievement. But the expansion of the readership in particular geographical areas will remain an area for strategic focus (see below).

68. The second concern is related to SciDev.Net's objectives and its ability to reach that segment of the audience involved with the analysis of science, technology and innovation policy and those that make decisions about such policies.

69. There is considerable force to the argument that a website like this is perhaps more suited to getting mass readership than targeting key individuals. And this line of argument suggests that the best way to increase SciDev.Net's influence is through getting greater readership, The mechanisms of influence may be indirect and intangible (i.e. increasing general knowledge and awareness of S&T) but may be more important. The number of readers should remain a major indicator of success.

70. Nonetheless, given SciDev.Net's objectives it should also do more to target specific audiences. It was evident from the answers to the On-line questionnaire that only a small minority of respondents held positions where they are able to influence policy directly. The majority of respondents who answered question 21 (on 'how has our material been of value to you in policy making?') were only loosely connected to policy making, and included for example science communicators NGO lobbyists and researchers who judged their outputs to be relevant to the policy debate[27]. About 20% of the respondents to question 21 (equivalent to about 5% of the user base of SciDev.Net) held positions where they are able to influence policy directly. Amongst this small group the main policy roles that were evident from the questionnaire responses included science funding, setting research priorities for research institutes, and contributing to the policy making within governments, donor and international organisations on science topics.

71. Unsurprisingly the proportion of each category of respondent who answered positively were policy researchers (61%), followed by research administrators (48%), consultants (43%) , Aid agency officials (40%) and NGO officials (39%)[28].

72. It could be argued that current users might well be a relatively high proportion of the total population of this category – the number of science and technology policy analysts in Africa cannot be very large. However, as part of this review an attempt was made through Internet searches to find people who were highly likely to have an interest in such policy analysis. This was used to generate sample populations for the focus groups and phone interviews This 'data mining' generated a large number of people who were not registered

[27] Only a quarter of respondents answered this open-ended question, which corresponds to the same percentage of respondents who stated that they are actively involved in developing policy in question 20.

[28] 33% of School students also said that they were involved in policy analysis, the absolute number was small (four respondents)

at the website[29] and provided prima facie evidence of the large potential for increasing this segment of SciDev.Net readership.

73. So despite considerable success in reaching its target users in a relatively short time frame, there is clearly very much more to be done.

If not, why not?

74. Significant parts of the audience are well served by some of SciDev.Net's products. But surveys of potential users show that there are very large numbers of potential users who are unaware of the existence of SciDev.Net and the services they offer. This suggests that a much more imaginative marketing strategy needs to be properly resourced and implemented as described in more detail in subsequent sections.

75. Many of the Focus groups concur with the view that SciDev.Net and the services it provides are largely invisible to large segments of the potential market. The South African focus groups noted that

> *SciDev is relatively unknown to many of the target audience. This may be attributed to the low visibility of SciDev and a marketing and communications strategy that can be best described as "passive".*

76. Similarly, the Indian focus group described SciDev.Net as having "*grossly inadequate publicity. Most potential users unaware of the existence of the site"*. In addition all participants in Quito and Guayaquil, Ecuador also suggested *"implementing a marketing strategy in order to widely promote the portal and its services"…. " Most of them remarked on the lack of publicity about the SciDev site as the likely main reason for more people not using the site"*.

77. But perhaps one of the most important findings from the surveys has been that many users and potential users, particularly of the policy analysts and policy makers, have formed an impression that SciDev.Net is not likely to be a credible source of information of the type of information they think they want. A number of respondents admitted on probing that they had not read the dossiers and were not aware of any of the quality assurance mechanisms that had been put in place (such as the Advisory Groups etc)[30].

78. One reason for this emerged from the telephone interviews which noted that:

> *"almost all users reported that their primary route to the website is through links in the weekly email, and they rarely visited SciDev.Net without the email prompt….The weekly email appears to have a strong influence on which sections of the website are regularly consulted by users. Articles that are highlighted in the weekly email (mainly news stories, editorials and opinion pieces) receive most visits".*

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[29] Although it must be said that a very high proportion of the people so identified did not reply to e-mail approaches.

[30] Reviewers of an earlier draft have wondered whether such "erroneous evidence" should carry such weight in the conclusions of this report. The point being made here is about the need to deal with "perceptions" about the credibility of SciDev.net for some types of information. This view was expressed by a number of key informants who said that they did not use the dossiers. But this view is also echoed both in the On-line questionnaire and the focus groups in relation to the limitations of the dossiers in their current form.

79. By using the links provided[31], users do not actually see any of the other content of the site unless they take the extra steps to following other lines on the stories they read. This is presumably also the case for those readers that get to an article via web searches using Google or other systems. Some 47% of visits appear to originate from Google alone.

80. This suggests that while there may be a need to modify the products themselves, there is certainly a need to overcome this credibility perception barrier.

How do they use it?

81. All of the evidence gathered suggests that users use the site primarily for news about science in the context of developing countries. The telephone interviews perhaps best encapsulate this by saying that

> *SciDev.Net appears to be most valued by users as a means to brief themselves on topics about which they are less knowledgeable, but need to gain a rapid understanding. Users would typically consult SciDev.Net if embarking a new research subject or to find out about a topic that was connected to their primary interest, including cross-cutting issues such as HIV/AIDS or climate change[32]. Many users stated that they use the website to get a quick sense of the debate surrounding particular topics. Editorials are seen as being particularly useful in this regard.*

82. The On-line Survey also confirms this conclusion. By far the largest proportion of users (nearly 70%), use it for the news. This was followed some way behind by Features (43%), with editorials, opinion pieces, notices, dossier and quick guides at just under 30% each. Sixteen percent did not reply and 4% said they did not consult any section regularly. The Regional Gateways were used regularly by only 13% of the respondents[33].

News	1538	69.5%
Features	964	43.6%
Opinions	642	29.0%
Editorials	660	29.8%
Dossiers and quick guides	618	27.9%
Regional gateways	292	13.2%
E-guide to science communication	424	19.2%
Notices of jobs, events, etc.	624	28.2%
Book reviews	293	13.2%
Letters to the editor	166	7.5%
Links	394	17.8%
I do not consult any of these sections regularly	81	3.7%
No response	346	15.6%

83. The telephone interviews also found that many users said that they return to the site regularly, typically once a week following the e-mail prompts.

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[31] Users value the e-mail alerts highly. Of the 1580 people who replied to question 31 in the online questionnaire over 70% said that they wanted the e-mail alerts to continue.

[32] For example a trade policy researcher reported that the site was useful as a quick source of information on scientific topics that are relevant to trade, including IPRs and GMOs . Another user mentioned that she used the website to get up to speed on new topics, for example the drafting of a research proposal on biological control of malaria carrying mosquitoes.

[33] While 2213 replies were received to the questionnaire, many respondents consulted more than one section regularly, so there were 7,042 responses to this question.

How do they value it?

84. The results of the on-line questionnaire suggest that nearly 80% of the respondents rated the site Good or Excellent. These views were held equally between respondents in developed and developing countries. This is an impressive result. Only three of the 2213 people who bothered to respond said that the website was poor.

Excellent	869	39.3%
Good	857	38.7%
Of mixed quality	138	6.2%
Poor	3	0.1%
No response	346	15.6%

85. The five categories that ranked SciDev.Net most positively (excellent + good ratings) were: Researcher (policy), NGO official, graduate student, Consultant, and Physician. While the five categories ranking SciDev.Net least positively were School students, University students, Aid agency officials, Librarians, and Industrial managers.

86. The most commonly mentioned strengths of the website relate to its news function. In rough order of frequency the following points were mentioned:

- The breadth, comprehensiveness of the website and the diversity of content. The ability to get a quick overview of current science and development issues.
- The timeliness, topicality and relevance of articles. Engaging with frontier issues.
- The quality of journalism – objective, balanced and accurate reports written in a clear, concise, punchy style using plain English and explaining science in simple terms
- The user-friendliness of the website – good design and easy navigation
- The global coverage of stories covering all developing countries
- The use of materials from scientific journals (Science and Nature) and links to other sources
- The usefulness of weekly emails and RSS feed

87. A few respondents identified non-news features as strengths of the website, including announcements, dossiers and opinions. It is striking that the South African focus group valued the dossiers particularly highly, but their report does not say why. This is in contrast to the views of other focus groups which are dealt with in paragraph 115 below.

How can value be increased for users?

88. The focus groups, telephone interviews and online questionnaire have all generated numerous suggestions on what new things SciDev.Net should do to increase the value of the site. These should be reviewed by management. But it will be important for SciDev.Net to be quite selective in which of these suggestions its takes up as there is a danger of losing focus and spreading resources too thinly.

89. SciDev.Net needs to concentrate on doing what it does best (reporting news) and bringing more users to the site. Resources need to continue to be put first of all into good

quality journalism and feeding in more local content onto the site. If new features are added there is a risk of doing things in a half hearted way. The non-English language support is a good example of this. It would appear to be only limited value to readers for SciDev to translate only headlines and the first few sentences of articles. The focus groups strongly argue that the translations should be more extensive. If this is not possible then money should be saved by not doing it at all.

90. As suggested earlier probably the most effective approach to making the material more useful to the policy audience is likely to be through "engagement" with this particular segment to determine their needs and to determine how well particular SciDev.Net products and services meet their needs (see paragraph 138).

91. While these ideas are illustrated mainly in the context of policy analysis (as this is a part of SciDev.Net's aims and was commented upon in the surveys), similar arguments could be made about other segments of the audience. For instance it might be argued that SciDev.Net could have the greatest impact on poverty reduction in aiming at least part of its services to school children and their teachers – both in terms of the popularisation of science and in terms of innovations in the teaching of science and technology for development. SciDev.Net may wish to consider developing communications products that meet the needs of this segment.

92. There was considerable clustering of opinions in the focus groups that users of SciDev.Net services wanted more "interaction" both with other members of their "community of practice" and with SciDev.Net itself. The evidence from these sources suggests that an opportunity has been missed to use the technology of the internet to enhance user involvement in the website. As reported in the telephone interviews:

> *In discussing the functionality of the website many users commented on the limited interactivity of the website. It was noted that SciDev.Net operates much like an online newspaper rather than an interactive website that invites user input. Many users stated that this format is well suited to their needs. However, about half of the participants in the telephone interviews considered that SciDev.Net should do more to use the technology of the internet to provide more interactive features*

93. Similar views were expressed in the South African focus group:

> *Many respondents were of the view that the interaction with SciDev was "one-way". However, they acknowledged that they had to take responsibility for this since they were unaware that "two-way communication" was possible[34]. One way of circumventing this misconception in the future is to engage in workshops which outline the attributes of the site.*

94. In the Chinese focus groups:

> *The majority of respondents who were current users concurred that communications with persons having similar interests was not pursued.*

[34] SciDev.Net has recently invited comments on the design of the African Science and Innovation Facility (See news item posted on 14 August 2006).

95. The Uganda group concluded that *interaction and networking between local Users of SciDev is poor*[35].

96. There was also a strong desire for more local content. This is explored further in the next section.

Overall Content

Is the content of the website seen as authoritative, relevant, useful, "the best" by users and key stakeholders (donors, sponsors, scientists?)

97. The evidence from the various surveys indicates that SciDev.Net has effectively established itself as one of, if not the primary source of news about science and international development. This is a major achievement. This 'news' is seen as authoritative and very well written by those that use it. It has even been suggested that the UK's Minister for international development considered that SciDev.Net was the site of first choice if you want to communicate to scientists

98. Many key informants made it clear that to achieve, and continuously maintain, this status and this reputation is extremely difficult. One competitor remarked "Do not underestimate this achievement when suggesting improvements"!

99. The surveys provide a large number of suggestions about how SciDev news services could be improved. These include covering a wider range of "sciences", more on "technology", "innovation" and associated "policies", more on science being undertaken in developing countries, and more local content more generally (there is "not enough news about what science is going on in Africa").

100. But, as suggested earlier, there is a clustering of evidence that suggests that a significant proportion of actual and potential readers (particularly policy analysts and decision makers) do not yet perceive the SciDev.Net dossiers as an authoritative source of information. This would appear to be for three reasons: preconceptions about the source; the depth of the analysis they contain; and lack of evidence over the authoritativeness of the content. Each of these will be dealt with in more detail in subsequent sections.

Is content from the developing world increasing as planned?

101. The number of news stories produced by freelance writers based in developing countries has risen sharply: from about 15 per month in January 2002; to about 17 a month in May-Jun 2004; and between 30 and 49 and month so far in 2006.. All but one of the 809 articles commissioned from freelance writers were from writers in (and from) developing countries. Of the 445 articles appearing so far this year, some 64% were produced by freelance staff in developing countries[36].

102. In a number of cases the commissioned articles are intended to be "localised" responses to science events or articles produced in OECD countries, but an increasing number are initiated and originated by the freelance writers themselves. Substantial sub-editing in London is said to be required to maintain the high standard of science writing that SciDev.Net requires.

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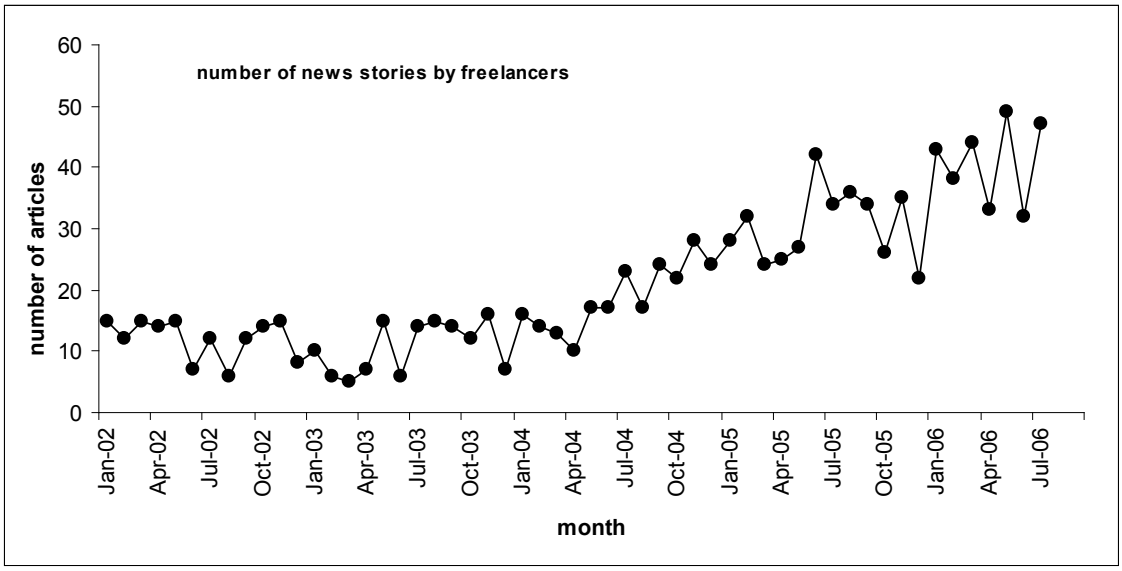
[35] Although the Uganda focus group did suggest the need for local chapters, such interaction could be facilitated on-line.

[36] This type of information could usefully be given greater emphasis on the site and in SciDev.Net's marketing messages.

103. The total number of freelancers that have ever written news for SciDev.Net is currently 131, increasing from 69 at the end of July 2004. Of the 131 freelancers 30% are from sub-Saharan Africa, 37% from Latin America, 10% from China, 17% from South Asia and 6% from South East Asia.



How can content be made more relevant to development goals?

104. The DFID report on Research Policy and other more recent sources have examined the difficulties of demonstrating the impact on development goals of specific items of research. More will be said about this in the sections below on Impact and Outcomes.

105. But the evidence from the focus groups does indicate that readers want content that is more related to their particular development goals. That is, they want more local content about their particular circumstances and they want to be able to contribute more of their own local content themselves. However the On-line questionnaire suggested that nearly half of the respondents were broadly satisfied with the balance of the content between international and regional news and country specific news was about right (46.7%). There are many possible explanations for this apparent divergence. Not least being that readers want more of both types of news (international and local) rather than in a shift in the balance.

106. All the focus groups expressed strong views on this point. For instance, the focus group in China said that

> *It is also suggested that a mechanism be designed to ensure the website truly reflects the views and needs of developing countries about concrete issues, instead of merely reflecting the views and needs that the London editors believe will be of interest to developing countries.*

107. In the case of the Indian focus group their report stressed that the

> *low spatial resolution of information limits its usefulness for potential users among policy analysts. Information should be as detailed as is technologically possible and should go down to as micro a level as required - country, province, district, sub-district, village cluster, village .*

108. Similarly the Ugandans reported that

> *Too much emphasis is placed on latest news and discoveries and too little on older science and technology, which would be more relevant to practitioners in Africa…… The conclusion of the discussion was that including more region and country specific information and policy issues would greatly improve the use of dossiers.*

109. The Ugandan also linked the idea of more local content to wanting to know more about how articles and other input to the site was commissioned*:*

> *The other issue that emerged during the discussions was most Users are unaware of SciDev's procedures for sourcing information/ people contributing information. Therefore their ability to contribute to SciDev is limited.*

110. The focus group in Ecuador expressed similar views

> *From a users' viewpoint, they think that the information on the web site is interesting, but at the same time, they feel it does not adequately reflect Latin American information.*

111. Many of the possibilities for increasing local content appear to be tied up with concerns about editorial control and quality assurance. While there are clearly strong reasons to protect the quality of SciDev.Net content, one way forward would be for the site to clearly separate 'quality assured' content from content that was not so assured. As suggested below in relation to dossiers there is already a concern over the authoritativeness of some of SciDev content, particularly where the originating source is not clear. This suggests that a virtue could be made from such a necessity, by clearly differentiating the content according to its known authoritativeness. Similarly there may be opportunities for separating editorial control from other management tasks which are more easily delegated.

112. The focus group in India felt that SciDev.Net should

> *Decentralize content production such that groups in the developing countries became partners in 'uploading' of content as much as in 'downloading'. Such content would, of course, be subject to rigorous validation and quality control processes. Quality Control over decentralized content production could be achieved regionally. An independent panel of external referees would be easily available and The Regional Coordinator could arrange for such peer review locally.*

113. Interestingly the Ecuadorian focus group came to broadly similar conclusions, namely

> *Most of participants felt that in order for scidev.net to become more effective and to achieve more beneficial impacts of scientific information in their relevant jobs, a validation Editorial Committee should be appointed in each country to select what should be published. Such a committee would ensure reliability and, additionally, would broaden sharing of scientific information"*

114. In summary it would appear that there is considerable room for SciDev.Net to make its content more relevant to development goals, but this is likely to require greater 'engagement' with practitioners in developing countries to understand better their needs,

more local 'ownership', and still more content provided by developing countries themselves. These three issues are developed further below.

What are the dossiers?

'Dossiers' are essentially a 'filing cabinet' into which are put a number of communications products on a particular topic. SciDev.Net describes dossiers as being

> *intended to provide a diverse but structured set of material that will act as:*
>
> - *a readable and authoritative introduction to a key issue at the science / technology / sustainable development interface;*
> - *a source of up-to-date information and comment about events and developments at that interface; and*
> - *a resource guide to other relevant material, organisations and discussion groups available on the Internet.*
>
> *With these goals in mind, each dossier has a clearly-labelled set of elements, including:*

1. A concise **introduction**.
2. A collection of recent **news** stories on the topic of the dossier;
3. A series of **'policy briefs'**
4. A series of **opinion articles,**
5. A **'glossary'**
6. Annotated links to key **international or regional organisations**,
7. Annotated links to the **main reports, scientific papers or other publications**
8. Annotated links to relevant **discussion groups**
9. Opportunities for **reader feedback**
10. A search facility.

Not all dossiers contain all these elements, and it is not immediately clear to readers of the website just what to expect from a dossier.

Dossiers

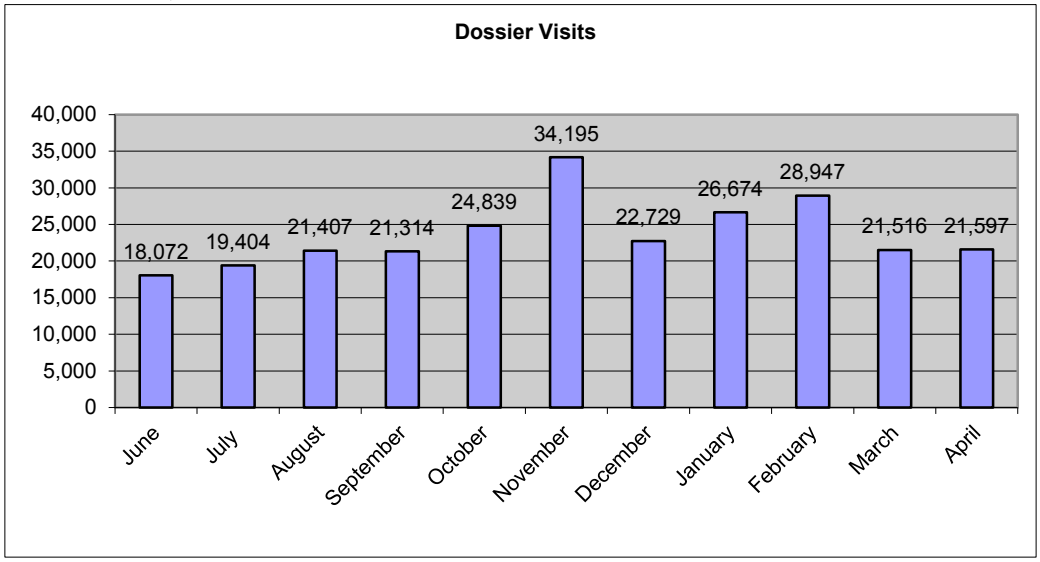
Who uses the dossiers?

115. The on-line survey shows that the dossiers are used by a range of different types of user. Some 40% of policy researchers said they consulted the dossiers and quick guides regularly, while about one third of the main other groups consulted the dossiers and quick guides.

116. Statistics are available on "visits" to dossiers and quick guides, but understandably there no data available on how many were read. The dossiers are not downloadable as such[37] and so there are also no data on downloads.

[37] Although some elements such as the policy briefs and many articles do have a "printer friendly version".

Dossier & Quick Guide Visits

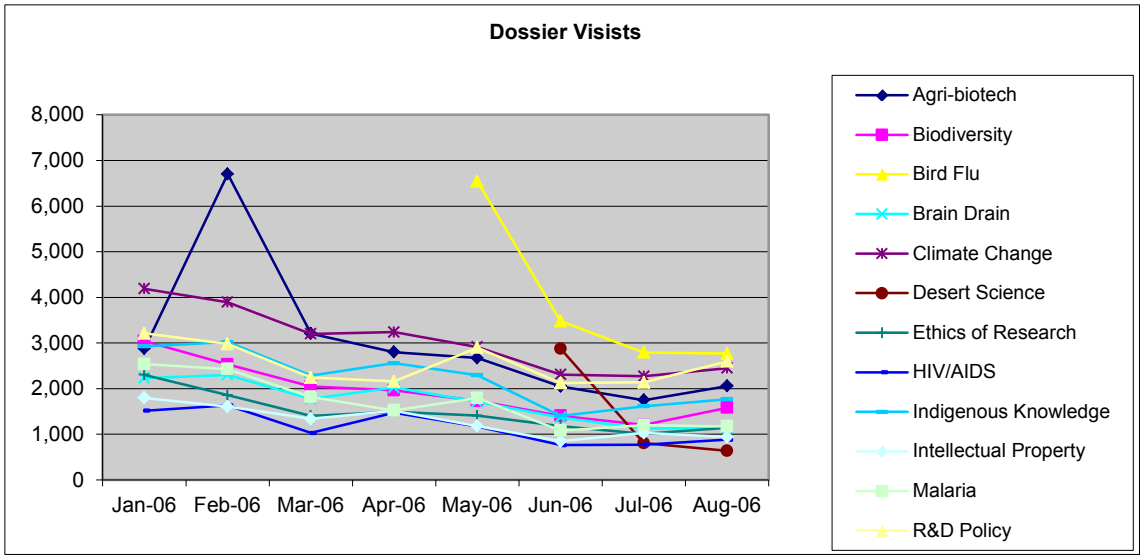


Which ones are most used and valued?

117. Visits to the dossier area of the web site vary considerably from month to month, topic to topic and visits to specific dossiers degrade over time. For instance the Agri-Biotech dossier saw a peak in February 2006 that was double the preceding and subsequent months. Similarly the Malaria dossier saw a considerable spike in November 2005.

Dossier	Monthly Av[38]
Agri-biotech	3,014
Biodiversity	1,937
Bird Flu	3,895
Brain Drain	1,710
Climate Change	3,058
Desert Science	1,437
Ethics of Research	1,474
HIV/AIDS	1,154
Indigenous Knowledge	2,234
Intellectual Property	1,280
Malaria	1,694
R&D Policy	2,543

[38] Over the period since January 2006. Note that bird flu has been available for 5 months and Desert science 4 months.



Is their content seen as relevant to users?

118. Some users certainly found the dossiers relevant, but it would appear from the interview and focus groups that more could be done to improve the relevance of the dossiers to particular segments of the audience. The relatively small number of topics covered (13) relative to the range of possible issues also limits their usefulness to the broad spectrum of possible users.

119. While some 79% of respondents replied to the On-line questionnaire concerning the use they had made of the dossiers (question 24), only 53% replied to the question identifying which elements of the dossiers that they used. This may well be evidence that many readers were not aware of the various elements within the dossier.

Q 24: Which of the following elements from dossiers have you used?		
Policy briefs	555	25%
Opinion articles	674	30%
Key documents	667	30%
Glossary	140	6%
Links	383	17%
Spotlights	165	7%

120. Some 22% of respondents (N=2213) had not used material from the dossiers, but about a quarter had used them in their research (26%), to write a report or article (28%), in teaching (18%) and as an inputs to a policy decision (13%).

Is content seen as high quality?

121. Many key informants (and focus group participants) said that while SciDev.Net was authoritative when it comes to news, it is not authoritative in relation to dossiers.

122. Typical of these views are the following quotations from key informant interviews and focus groups:

> *"Dossiers are often too hyped up so as to make a news story", "SciDev.Net gets material from authoritative sources but dossier is not itself authoritative", "many other organisations do dossiers more credibly", "dossiers are not sufficiently marketed to policy makers".*

123. The telephone survey also found that:

> *The interviewees who did make regular use of the dossiers held rather mixed views on their quality. Several users stated that the dossiers were one of the main strengths of the website and were generally well produced. Many interviewees found the dossiers to provide a useful synthesis and convenient source of information on new topics. However, it was generally considered that the dossiers were rather introductory, and while this served an important purpose and would be of use to a general audience, specialists would not learn much. Some respondents stated that they found the dossiers most useful to inform themselves about issues on the edge of their professional responsibilities. A few interviewees stated that the dossiers added little value to the website, and that in many cases they provided only a brief overview linked to content that appears elsewhere on the website. It was also suggested that there was a lack of consistency in the format and level of detail of different dossiers.*

124. In India

> *Both policy analysts and science journalists agreed that 'dossiers' were the most useful parts especially for getting competent and well written background information on subjects outside their own spheres of specialization. But the usefulness of dossiers for policy analysts in their own areas of focus could be realized only if the reports were substantially more exhaustive and in-depth and if links and sub-links could lead to web libraries, digitized research reports / documents and all allied knowledge resources available on the web through the SciDev window. The dossiers could then serve as centralized 'meta-data' through which users could access all the peer reviewed web based research material on the subject.*

125. Many key informants who also shared some of these negative views of dossiers, but when pressed admitted that they had not read any of the dossiers at all. Furthermore they did not recognise or accept the idea that dossier were backed by advisory groups see below. Those informants that had clicked on the dossier button remarked that the first thing one saw was the "news" that they had already seen in the main body of the site.

126. One part of the problem of credibility may be associated with the web design, in that it may not be obvious to some readers what role the people listed down the right hand side of the page actually play in quality assurance. Another part of the problem may be that the "full introduction" are usually, but not always, signed off by the dossier co-ordinator. It is generally not possible for the reader to assess the competence of the co-ordinator from the web site. In some cases they are experienced journalists, and in others they seem to be young scientists with specialist knowledge of the area of the dossier.

127. The message from the audience seems to be that they want to know that the material is credible, and that it comes from quality assured sources. While there a sense in which the SciDev.Net brand seems to have high credibility when reporting the news, it does not seem to carry sufficient weight in relation to assuring the quality of the dossiers. This greater credibility may well be achieved by clearly signposting on the web page, greater clarity on the extent to which the content is quality assured and by whom, and greater prominence to highly credible sources (such as Nature and Science). It has been noted earlier that there appears to be no mention of the association with Science and Nature on the home page.

128. Another part of the problem of credibility stems from the existence of many actors providing communications products to this market segment. Many of the topics covered by dossiers are also covered by similar "policy briefing products" from other organisation. Many of these are produced by organisation that are particularly well identified with the topic and are already seen as very credible by the intended audience. A case in point is HIV/AIDS where dossiers have been produced by many organisations including IDS, the HIV/Aids Alliance, WHO, and The New Scientist.

129. With so many other actors in this field, a number of key informants have asked why SciDev.Net bothers to target this type of product to this market segment. The main reason would appear to be that policy makers and analysts are one important segment of the audience through which SciDev.Net can most easily demonstrate to its financial supporters that it has a "development impact" [39] .

130. Furthermore it would also appear that SciDev does have a role in providing a particularly "scientific perspective" to issues that are not addressed by these other organisations But it seems likely that that SciDev.Net needs to make clearer to both potential writers and to the audience just what its perspective is: namely the interface between 'credible science' and 'development'. This angle should give Scidev.Net a unique selling point relative to their competitors. For instance, a dossier on HIV produced by SciDev.Net should be clearly perceived as being quite different from one produced by ELDIS at IDS, or indeed one produced by WHO. This distinction is not currently apparent.

Is the current format right?

131. The evidence from the focus groups is somewhat confused, with some suggesting the format and depth of the analysis is satisfactory (SA) and others wanted a more in depth analyses. The guidance notes provided to authors of dossier elements are clear and well written and currently suggest that "Authors of Policy Briefs should remember that they are writing for an essentially non-technical audience, and adjust their language accordingly. In other words, knowledge of technical terms beyond a certain level should not be assumed[40]". But the dilemma facing SciDev.net is clearly demonstrated by potential users in the focus group in China who state that

> *The contents of SciDev.Net are the middle level between academic and the public. Scientists would not read it because it is unprofessional, and average public would not read because it is too scientific for them.*

132. The guidance suggests that policy briefs can contain up to 10 references, and should refer to the principal sources of information that have been drawn on, particularly where the source is available electronically. A number of focus groups wanted more links to key documents, particularly if they could be down loaded electronically.

133. More importantly there was a concern that SciDev.Net should be clearer about the sources and references to the material in the Dossier. For instance

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[39] While teachers and school children are not currently target audiences for SciDev.net in principle they could be, in which case similar issue would arise about producing communications products that specifically meet their needs. These are all part of a more general issue of providing specific communications products that best meet the needs of particular segments of the audience.

[40] More specifically they advise that "An article on genetics, for example, could assume knowledge of the concept of a gene, and even of the process of gene expression and the relationship between genes and proteins. But concepts such as SNPs (single nucleotide polymorphisms – the variation of a single nucleotide within a sequence of DNA) should be explained".

> *No indication of validation/quality control processes followed and how and why the content should be treated as authoritative and reliable* (India FG).

> *"Sourcing of information such as articles to put on the website was not clear to the participants. For people trying to quote SciDev.Net contents, they seem less reliable, at least at first sight"* (China FG).

134. A number of key informants also remarked that the audience of policy makers is mostly influenced and informed by "paper". It is suggested that civil servants and advisors want to be able to put a short piece of paper in the minister's brief case. If true (and only further engagement will tell), this suggests that the main components of each dossier (and not just elements of it[41]) need to be more easily downloaded and printed, possibly with a single mouse click.

What improvements could be made?

135. The dossiers are expensive to produce[42] (though not more so than at other comparable institutions) and required both time and care to get them right and keep up them to date. This considerable effort together with the weight of evidence that the dossiers are not working well suggests that they, and other communications products intended to reach policy makers and analysts, need to be fundamentally re-thought, and not just re-launched.

136. Throughout this report it is suggested that such improvements will require forms of 'market research' in which new communication products and services are tested with their targeted audience segment and adapted in the light of experience and feed back. This is often referred to as an 'evolutionary' approach.

137. Increasing the credibility of the dossiers, or particularly the perception of credibility, will also form part of the improvement process. The current perception may be improved in part by making SciDev.Net's existing quality assurance procedures more visible to the audience. Credibility is also likely to require associating the output more closely with writers and organisations that are deemed credible to the audience. In addition the demand for more local content mentioned above applies with equal force to the dossiers.

138. The need to increase the credibility and the need to spread the burden of producing this type of output but suggest that serious consideration should be given to co-producing the dossiers in association with other organisations. This is likely to be most successful where it is possible to combine SciDev.Net's Unique Selling Point (namely, the ability to communicate science and technology to a non-specialist audience) with inputs from organisations that lack these writing skills but are already are regarded as credible to the target audience.

139. These ideas are developed further in what follows. But it is worth noting at this stage that the need to spread cost through forming partnerships was suggested in the China focus group.

> *Participants understand the limits of what SciDev.Net can do with its limited resources. They suggested that more partnerships with local organisations might help remove these constraints. In particular they mentioned getting partners to*

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[41] The policy briefs do have printer friendly versions.

[42] Costing approximately £12,000 each, Karen Lewen, SciDev.net interview 31 May 2006.

> *post their information directly on SciDev.Net and joint efforts to undertake and pay for translations. They argued that the Regional coordinator of SciDev.Net should not work mainly as a reporter/editor, but rather he or she should be coordinating others' work and seeking to develop more partnerships.*

140. The need to meet the needs of a large number (and wider range) of policy analysts also provides a strong argument for considering the production of more policy briefs possibly more tightly defined to cover a narrower set of issues. This is not necessarily a proposal to spend more or less on dossiers (though consideration of this aspect of the budget will be important), but it is an argument for seeing what sort of product could be developed if say 12 communications were produced a year for the amount of money currently spent of far fewer more elaborate dossiers.

141. This approach is in keeping with the key informants who suggested that SciDev.Net might do better by trying to be more 'newsy' rather trying to produce a comprehensive source. If this approach were pursed dossiers might become six monthly updates on what is new say on a topic such as HIV/AIDS or climate change. It would be a matter of market research to determine whether there was sufficient demand for this type of information.

142. It was also suggested in this context that dossiers (including those that might be described as 'dossier-lite') might also be considered more useful by policy makers and analysts if the were linked more closely to upcoming events (such as the African Union's S and T summit) and efforts were made to ensure that they appeared on the web in advance of the time when the policy analysts are doing their work to help prepare government policy.

How can the range of users be increased?

143. Increasing the range of users will require targeting the marketing efforts to those segments of the market that are identified as important either to the trustees or to other stakeholders, such as the donors.

144. As suggested earlier this could be achieved through more concerted efforts at "data mining" (possibly using interns or locally contracted temporary staff) and working more closely with (even nurturing) existing "communities of practice" [43] that already interact with a particular market segment. The Indian focus group specifically raised the idea of developing communities of practice:

> *Unless a much bigger role is envisaged for knowledge production and interaction in the regions and the regional Co-coordinator empowered to establish 'communities of practice' the possibilities of SciDev emerging as an active and lively network are probably limited.*

145. In Africa, for instance, the S and T policy audience segment already appears to contain a number of overlapping communities of practice, such as the alumni of IDRC's S and Technology funding programmes, NEPAD's Science and Technology Group and the African Ministerial Council on Science and Technology. The South African focus group

[43] An epistemic community may consist of those who accept one version of a story, or one version of validating a story. In philosophy of science and systems science the process of forming a self-maintaining epistemic community is sometimes called a mindset. In politics, a tendency or faction is usually described in very similar terms. See for instance http://www.ewenger.com/theory.

also identified a number of communities of practice with which their participants were involved:

> *Many respondents (current and potential users) were well connected, electronically, with other user groups within their professions, e.g., Crop Biotech, IAIA (International Association for Impact Assessment), AfricaBio, IWSA (Institute for Waste Management in South Africa), etc.*

146. While these and other communities are no doubt well known to SciDev.net already, much more could be done (possibly by a locally delegated person or through a strategic alliance) to increase the communication between the community participants, and between the community and SciDev.net.

Are the dossier advisory panels working?

147. Of the 13 dossiers currently on the site, all but two have advisory panels. The brainstorm with dossier co-ordinators suggested that the advisory panels have been of mixed success, with most probably not working effectively. In most cases the Advisory Panels were said to have provided very little input, although some individuals had made a significant input from time to time. In selecting panel members there appears to be a delicate balance to be struck between involving the worlds leading (but busy) experts on the topic, and individuals who are less well known but who have more time to contribute to the work.

148. The aim of the advisory panels is not only to ensure that the dossier contain appropriate information, but to 'quality assure' and even 'sign off on' the content. While this may well happen in some cases, the evidence from the interviews and focus groups suggest that the audience is not aware of this process, even if it were working effectively. At the very least these processes need to be more transparent and visible to the reader at an early stage of their visit to the site.

Outcomes and Impacts

What is the evidence of outcomes/impact

149. Science and technology, and communications about them present a particular paradox. At the macro level these is strong evidence of the hugely positive impact of scientific and other research on economic performance, international competitiveness, and 'development' more generally. At the same time there is little evidence to draw robust conclusions about the impact of *individual* scientific research activities and communications associated with it. The innovation systems literature tells us that change of any kind in many developing countries is going to be difficult with existing framework conditions and lack of infrastructure facing developing countries. It is unlikely that individual programmes, let alone projects, can buck international trends that are operating against poor people in developing countries. Aid agencies and other sponsors not aware of this evidence tend to have unrealistic expectations of the "impact" that a particular communications product should have.

150. However, the evidence from 'communications research' that does exist suggests that effective impact is likely to be a function of

- The credibility of the source (as perceived by the audience)
- Communication in a format that the audience prefers

- timeliness[44].

151. In relation to SciDev.Net there is evidence that important knowledge is being communicated to a significant number of appropriate people in the developed and developing world. What they do with this knowledge is more difficult to establish, though attempts were made to find out through the qualitative surveys. SciDev.Net itself has recently started to routinely collect anecdotes about impact. It will be important for SciDev.Net to continue to collect this type of information. Some useful anecdotes resulted through the Telephone Interviews[45]. However, some of the focus groups reported that they were not able to assess impact.

152. Question 18 of the On-line survey shows that readers did feel that the site had had an impact on the way they do their jobs. Most of these impacts resulted from increased awareness and background knowledge on science and technology. It was striking just how few people felt that it "it helps me inform the decision making of others" (16%), though this inevitably follows the relatively small number of readers who perform this type of role.

It keeps me up-to-date with relevant news	1519	68.6%
It provides valuable comment and insight	874	39.5%
It brings my attention to important issues	1210	54.7%
It provides valuable background information on key issues	1042	47.1%
It is a good source of relevant reports and contacts	910	41.1%
It helps me inform the decision-making of others	362	16.4%
Other (please specify)	103	4.7%
No response	457	20.7%

Improved decision-making related to S&T?

153. Again the evidence is difficult to obtain. But at one end of the spectrum some 13% of respondents to the On-line survey stated that they have used the material from the dossiers as input into a "policy decision" (question 24). At another, it was suggested that a SciDev.Net Editorial seems to have resulted in a higher profile being attached to science and technology in the recent DFID White Paper[46].

154. However, overall the evidence from the dossiers suggests that SciDev.Net has aspirations to achieve impacts in this area, and that this impact could be greatly improved in the years to come.

Awareness and education of users – enhanced access to knowledge, better understanding of issues, etc.

155. As suggested earlier the site is particularly highly valued for its ability to raise awareness and keep the reader informed. Answers to question 23 of the On-line

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[44] The innovation literature also suggests that even with effective communication, the ability of the "audience" to act effectively to produce favourable impacts is itself highly constrained. This literature has been summarised in many places (see Andrew Barnett, **From 'research' to poverty reducing 'innovation'**, a policy brief from SRA Ltd, January 2004. Downloaded from: http://www.cphp.uk.com/uploads/disseminations/NSIPolicyBriefbrochure23feb04.pdf .and including the ODI Rapid web site. http://www.odi.org.uk/RAPID .

[45] These include the design of an African Science and Innovation Facility, the formulation of Kenya's recent environment policy and the drafting of a climate change strategy for a nature conservation body in southern Africa. However, these cases are relatively few in number, and it is difficult to demonstrate a clear impact of SciDev.Net in shaping policy.

[46] DFID, personal communication.

questionnaire suggest that over half of the respondents felt that the material they had read on the site had allowed them to expand their professional knowledge and skills (52%). Nearly two fifths of the respondents felt that it had increased their awareness of the importance of science and technology and it had helped nearly a third to raise the awareness of others. This is broadly similar to the answers to question 18 concerning the usefulness of the site, referred to before.

Impact/influence on public policy

156. There is no specific evidence that SciDev.Net has a particular impact on public policies other than those mentioned previously, concerning science and technology policy and general awareness of readers some of whom are policy makers. But SciDev.Net's hypothesis does seem credible that policy makers learn about science at least in part through what they read in the press. If awareness of policy makers is raised this may well have an impact on public policy. However the impact is currently limited by the relatively modest numbers of policy makers who access the site.

Improved science journalism in developing countries

157. The training provided by ScviDev.Net is highly valued. But it has also provided valued interaction and mentoring with its stringers. This subject is dealt with below in the context of capacity strengthening.

Getting S&T4D onto donor agendas

158. Again the evidence is difficult to obtain. However, one key informant from Africa strongly asserted that SciDev.Net had contributed significantly to raising the profile of science and technology for development in Africa. There seems little doubt that "S&T4D" is back on donor agendas, and that such developments have many 'parents'. Similarly these events add to the likelihood of future funding for SciDev.Net and add to the potential audience.

Overall contribution to development goals

159. 'Development' has been plagued by abruptly changing fashions. The history of both IDRC and DFID, together with the World Bank and other donors has exhibited a turbulent attitude to science, technology and development. Investing heavily at some times and almost not investing at all at others. In recent years the focus has been on achieving direct poverty reduction to the exclusion of any support for so-called infrastructural services, including scientific and technological infrastructure. So primary education was favoured over tertiary education. And 'research' was regarded as if it was the opposite of 'action'.

160. This has been in marked contrast to OECD government's behaviour in their domestic markets. There investment in science and technology has been seen for some long time as an essential driver of international competitiveness and therefore economic development.

161. The pendulum has begun to swing back again so that science, technology, research are again valued as critically important to development. But this time the arguments are somewhat different and justification is sought in terms of 'poverty impact' rather than knowledge per se, or the culture of the 'scientific approach'.

162. All this has implications for SciDev.Net, and particularly a shift from knowledge creation to the processes of innovation[47]. It means that many respondents are keen to see

[47] These issues are addressed in SciDev.Net Policy brief on "Building science, technology and innovation policies" by Joachim Ahrens, May 2005

more about "technology" rather than just science, and they are keen to see technologies that are relevant to their context. Typical of this concern are the views of the Uganda focus group that:

> *Too much emphasis is placed on latest news and discoveries and too little on older science and technology, which would be more relevant to practitioners in Africa.*

Networking

Are there regional/country networks that are stimulated by SciDev.Net?

163. The overwhelming impression gained from the respondents was that SciDev.Net had not been effective in building networks, but there was considerable demand, particularly for "local chapters". For instance the focus group in Uganda stated that

> *Interaction and networking between local Users of SciDev is poor.* [The web site needs to] ... *Increase interaction between regional and national SciDev users by introducing and facilitating networks, country chapters, chart forums and public discussion forums*

164. In the South African focus group

> *Many respondents were of the view that the interaction with SciDev was "one-way". However, they acknowledged that they had to take responsibility for this since they were unaware that "two-way communication" was possible.*

165. In China

> *Neither users nor non-users felt that they were part of a network initiated by SciDev.Net.*

166. In India the focus group report suggested that

> *The presence of SciDev as a network and as a stimulator, catalyst of interaction, collaboration and sharing has yet to be felt even among the registered users. In fact, the focus group meeting was found to be the first useful interaction among the fraternity of those concerned with science and development related matters: Presently Scidev is largely a one way communication exercise with some undercurrents of "us" (the developing world) and "them" (the developed world)*[48].

167. The Online survey found that over 50% of respondents would be interested in being put in contact with others in their country or region that share an interest in science and technology communication (question 39), and in attending events organised by SciDev.Net (Question 38[49]).

168. One key informant concluded that "they will only achieve networking if there is something for the network members to do together".

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http://www.scidev.net/dossiers/index.cfm?fuseaction=policybrief&dossier=13&policy=62

[48] See also paragraph *144*.

[49] "Would you be interested in attending events organised by SciDev.Net on contentious issues at the interface between science, technology and public policy?"

Regional gateways

Who uses the regional gateways?

169. The Online survey suggested that the regional gateways were not used by many respondents (Question 11, 13%). As suggested earlier this may partly due to the fact that most readers come to the site via stories in the weekly e-mail alerts or through web searches[50]. The main users of the gateways were policy researchers (22%), and consultants (20%). Of the total number of respondents slightly more users of the Gateways were from developing countries (14.6%) than from developed countries (11.4%).

170. Data from Google Analytics provides a similar picture showing that of total number of visits to the site some 8% visited the Regional gateways[51].

Is their content seen as relevant to users?

171. Text on the site states that "*Regional gateways bring together articles and information relevant to different parts of the developing world. Most items appear elsewhere on the website, although those that are primarily of regional interest may only appear in the relevant gateway".*

172. The relative lack of use suggests that the content is not yet relevant to users[52]. Given that most of the information is on the main web-site, and most readers want to know what is going on in the world, there may be little incentive to go to the Gateways. But as noted earlier there is a strong demand for more local knowledge and more local inputs[53]. Regional Gateways could play a greater role in localising the content and getting more local ownership. As the South African focus group noted that "*from the user group, there was limited use made of the "Regional Gateways". However, potential users indicated that they considered this as an important window to learning about developments in other countries".*

173. Similarly the Telephone Interviewees reported that "*Regional gateways could be further subdivided. For example, several users in Southern Africa stated that it would be useful to highlight Southern Africa related news rather than to have to browse through all of the content relating to Sub-Saharan Africa".*

Is content seen as high quality?

174. The quality of the content of the Regional Gateways was not raised by respondents, but is anyway largely the material available elsewhere on the site.

Role of Regional Advisory Committees

175. The Regional Advisory committees were not visible on the website and were not mentioned by respondents.

176. Regional or even National Advisory Committees could provide the site a greater sense of local ownership, counter the "northern-ness" that many respondents noted and increase the local content. But to do this they would have to be given considerably more visibility

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[50] See paragraph 78.

[51] Personal communication from Jemma Tonks, 25th September 2006.

[52] SciDev.Net point out that other interpretations are possible, but did not specify what they might be.

[53] See paragraph 106.

and probably more responsibility for vetting content, and proposing areas to be covered by the site.

Role of Regional Coordinators

177. The regional co-ordinators do appear to be playing an important role in the development of SciDev.Net.

178. Some difficulty has been experienced, apparently in finding and keeping relevant people in Sub-Saharan Africa outside South Africa. It was not clear why this was. But insofar as it is a function of the scarcity of appropriately trained people, this may well be an area that could be covered through a strategic alliance with organisations in Africa that might benefit from the services and visibility offered by SciDev.Net.

179. A number of the focus groups saw an increased role for the Regional Co-ordinators, particularly in leading the way to more local content and greater delegated responsibilities. This is apparently already happening to some extent in Latin America.

180. In the China focus group (where the report was written by the Regional Coordinator)

> *They argued that the Regional coordinator of SciDev.Net should not work mainly as a reporter/editor, but rather he or she should be coordinating others' work and seeking to develop more partnerships* ...[and enabling] *partners to post their information directly on SciDev.Net*

181. Similarly in India the focus group[54] saw the regional coordinator playing a much larger role:

> *A strong case was argued by many participants for strengthening the role of the Regional Coordinator, especially in commissioning content production at the regional/country level and for facilitating greater uploading of information from the developing countries. It was also suggested that the Regional Co-coordinator or a Regional Advisory Group could also play a bigger role in the choice of thematic/subject area priorities of specific relevance to the region.*

Capacity development

Training workshops – effectiveness

182. The journalists at the focus groups were particularly enthusiastic about the courses for journalists. For instance the Chinese focus group reported that

> *All participants, including those having attended SciDev.Net's science journalism/communication training workshops and those who just learned of these activities at the focus group, were highly appreciative of this service and work. None of them have ever heard of similar activities in China before. The participating journalists hope that SciDev.Net can offer more of these services and spread the results from the workshop among non-workshop participants. Compared with to some of the negative attitudes to the SciDev.Net website, it was striking that no one has any negative comments on the science communication workshops initialized by SciDev.Net in China.*

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[54] In this case the report was written up by an experienced external consultant but with the Regional Coordinator present at the focus group.

183. One trustee and one donor asked whether it was an appropriate function for SciDev.Net to run courses. It was argued that SciDev.Net did not have the resources to undertake training courses on a one-off basis. It was explained however that the staff very much liked these events and were good for their motivation. Certainly this would appear to be another area in which it would be appropriate to form a strategic alliance with a provider of such services that had the capacity to capture economies of scale and was able to provide the necessary support and follow up. Both IDRC and DFID intend to provide substantial support to science journalism training in some parts of the developing world through the World Federation of Science Journalists (WFSJ)[55]. SciDev.Net clearly can help in this process by providing a market for the services of the trained journalists.

Training/mentoring science journalists in developing countries

184. Some 44% of respondents said that they would make use of a short online training course on science journalism (question 36), and a similar percentage would make use of a short online training course on how to interact with science journalists and other science communicators (question 37).

185. One key informant suggested that the high reputation of the SciDev.Net' Director and his team in London provided a strong incentive for young journalists in the UK and stringers more generally in developing countries to work for SciDev.Net.

Technical/ infrastructure

Website architecture

186. In terms of the focus groups and other sources of evidence there appeared to be general agreement that the web site was broadly satisfactory in appearance and functionality. In many ways the site appears similar to (and faces the same problems as those of) the Economist, and the New Scientist. Typical of the these views were those expressed in the telephone survey which said that

> *The large majority of users commented favourably on the design, usability and functionality of the website, which was generally considered to be simple to navigate, fast to download, and attractive in appearance. However, several interviewees commented that the website was rather traditional in appearance and pages were somewhat overloaded in textual content and lacking in graphics. Several users commented that the search function is not very effective and precise, and is not prominently displayed on the homepage. Many complained that it was particularly difficult to find archived articles.*

187. Many aspects of the design have been considered in terms of the site's content, interactivity, and local ownership. But perhaps the most important to stress here is the need improve the credibility of the site as perceived by the audience before they actually get to see the content of the dossiers. This would complement the already high reputation the site has for science news. This would probably involve giving more prominence to the association with Nature and Science, to named credible authors, and the quality assurance processes. The focus groups also appeared to attach considerable importance to making

[55] The WFSJ is creating a three-year Peer-to-Peer Development and Support of Science Journalism in the Developing World. The project will pair 60 science journalists from Africa and the Middle East with Northern and Southern science journalists. This network of peers builds on the contributions of WFSJ members, both journalists and associations, and will strengthen science journalism in developing countries. IDRC is providing initial funding of CA$800 000.

more transparent the processes by which material is commissioned and validated. In the words of the Indian focus group:

> *Establishing brand equity for the content by making transparent the validation, peer-reviewing, quality control processes and by providing details of authors / contributors and their standing in the field*[56].

188. In terms of meeting the various needs for future development consideration may need to be given to an architecture that facilitates the separation of the more quality assured content from less quality assured inputs. The BBC website appears to be adopting a variety of techniques to achieve this separation as it strives to increase user participation without compromising the brand image for quality and balance.

Inputs about the new web re-design/restructure

189. For reasons given above any new design probably needs to be able to cope with

- the possible introduction of advertisements (of a type and in a form that will not undermine credibility),
- the segmentation of users by country of location (possibly through an 'authentication' system) to provide the possibility of charging fees to certain clients, if this should prove necessary and feasible.
- Greater interactivity, such as through moderated blogs and specialist interest group discussions and fora.

Access and ease of use in different parts of world

190. Access seems to be less of a problem than might have been expected as access is increasing rapidly throughout much of the developing world. However there are still many research institutes in Africa that do not have fast internet access.

191. In Ecuador it was noted that

> *Several participants stated that when they visited the site, they were not able to see graphics and photographs and that several times access took too much time.*

192. Similarly the Chinese focus group noted that the

> *Website speed is slower than many domestic websites, and ....The Chinese email alerts are often illegible and contain a jumble of code*[57].

Interactivity – future developments

193. A number of suggestions were made by respondents about the rapidly developing technology for group interactions, such as those associated with MySpace, and Podcasting[58].

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[56] The report's author explained where "Articles/Reports/Documents etc are presently anonymous and as Scidev itself is unknown there is no value associated with the name. An article appearing in Science or Nature ,for example, has a strong brand equity carrying a guarantee of conformity to the highest standards of scientific writing. While it will take a long time to achieve such brand equity, it should be possible that if the SciDev authors have a standing in the field then carrying a Byline will spell a measure of quality. This would eventually help SciDev build a strong 'Brand Equity'. SciDev.Net has pointed out that articles are not anonymous.

[57] It has been suggested that SciDev.net might consider mirror sites with overnight refresh to overcome this problem.

[58] Podcasting is a method of publishing audio and video files via the Internet. Users are able to subscribe via RSS feeds which can be downloaded onto your mp3 player or computer desktop, where you can listen via a media player. For instance see the New Scientist podcasts: http://www.newscientist.com/podcast.ns

4 SciDev.Net's opportunities for future growth, and in particular its potential contribution to the social and economic development of developing countries;

The Competitive Environment

What is the competition?

194. There would appear to have been a considerable increase in interest about science, technology and development since SciDev.Net started. And with this increase in interest has been an increase in number of organisations that are already actively 'communicating' on these or related topics. However, for the time being it would appear that SciDev.net still occupies a unique position. The respondents to the telephone interviews were not aware of another website or journal that covers the same breadth of science news as SciDev.Net and was focused on developing countries. However, most users do consult a large number of other websites and journals that cover narrower and more specialist topics.

195. But if no one is occupying precisely the same turf as SciDev.net there are many players occupying parts of the territory. More than half of the respondents (1103) to the Online survey answered question 26 concerning other specific online sources that they used. Their responses were very diverse and exhibited a long-tail distribution. In other words there were relatively few online sources that were mentioned by a large number of users, and a large number of specialist sites that were each mentioned by only a few users. The most common responses were identified using keyword analysis. This indicates that the most frequent alternative sources of science news that SciDev.Net users refer to are the BBC, Science, Nature, The New Scientist, The New York Times and Scientific American.

196. In the South African focus group also noted competition from a number of sources:

> *"Science in Africa" was found to be similar but lacked the depth of information which SciDev provided. ....Many indicated that ScienceDirect is an excellent website for similar information and covers a wide range of topical issues. CabDirect was found to contain more depth of information but neither is available free of charge*[59].

197. The very recent emergence of "Research-Africa.net" poses a particular competitive threat to SciDev.Net not only because it covers some of the same topics in a strategically important part of the world, but because it is testing a cost recovering business model. If they are even partially successful this is likely to mean that donors such as DFID, who are currently investing in this venture, will expect similar cost recovery for SciDev.Net. It will therefore be important for SciDev.Net to explore these options, and start the process of compiling evidence that it has done so seriously.

[59] While these sources would appear to be costly subscription only sources, it is important to note that a significant segment of the audience appears able to obtain access to these sources. This appeared to be the case for instance for participants in the Chinese focus groups as well as in South Africa.

198. In journalist training, it has already been mentioned that there is major competition from the World Federation of Science Journalists (WFSJ). However SciDev.Net is already "actively partnering them in some respects"[60].

199. Similarly reference has already been made to the many of the major institutions in the development business appear to have recognised the need for communications products to meet the particular needs of policy makers and policy analysts. These range from the ODI and IDS, to the various departments of the World Bank and DFID, to the 'advocacy departments' of the proliferation of NGO working on development.

200. So SciDev.Net faces significant competition for both audience and for funds. But it does have a lead, particular competences and a clear niche in which to operate. These will need to be emphasised and sharpened, but they do provide a strong base on which to build its strategy for the next phase of development

Who are the strategic partners for SciDev.Net?

201. During the course of this review it has become increasingly apparent that new strategic partners, or strategic allies, will become an essential component of SciDev.Net's future development. Two principal reasons have been put forward for this. First SciDev.Net does not have the resources to do all it wants to do and needs to share the burden with others; and second, SciDev.Net needs allies to provide inputs that it cannot easily do. As suggested earlier the need for strategic alliances are likely to cluster around overcoming the credibility gap that SciDev.Net is experiencing with certain audiences, particularly in the policy area, and in providing more local 'ownership' and local content (see paragraphs 105 and 138). Precisely who these partners are will depend on the strategic direction SciDev.net chooses to take[61].

202. SciDev.Net has already made many attempts to establish partnerships. Some have been successful, such as those with Nature and Science. But it appears that many others have not yet come to full fruition. Some of these approaches for partnership were interpreted as "selling the SciDev.Net idea" rather than seeking areas of mutual interest. One key informant said in this context that while "SciDev.Net is seriously concerned with capacity development, it is not networking". A number of key informants felt that an impression has developed that SciDev.Net lacks the willingness for 'genuine collaboration' and partnership.

203. Part of this impression is that at the heart of the problem of partnership for SciDev.Net is the issue of loss of 'control', editorial independence and quality assurance. These are important issues for SciDev.Net and the future credibility of its brand. As one experienced key informant explained "Partnerships add complexity and undermine quality".

204. But it would appear that SciDev.Net has little option but to work more extensively with others if it is to expand rapidly and achieve its objectives. Finding new ways of

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[60] SciDev.Net comments on earlier drafts.

[61] one reviewer suggested that synergy could be gained for SciDev.Net is through alliances with like-minded complementary activities such as the provision of full-text online policy & research information. These include the Directory of Open Access Journals (DOAJ) http://www.doaj.org and: INASP Directory of Free and Open Access Online Resources http://www.inasp.info/peri/free.shtml In the area of health http://www.healthinternetwork.net would also appear to be important. INASPs' Programme for the Enhancement of Research Information (PERI), includes full-text online journals for major science publishers http://www.inasp.info/peri/resources.shtml.

forming these relationships, without undermining SciDev.Net's reputation for quality is likely to be a strategic priority for both Management and trustees.

205. One possible way forward would be to abandon the term "partnership" as it is given so many interpretations to be almost meaningless. But at its centre the term implied or assumed a degree of equality between the partners. It is this feature that seems to have posed the stumbling block for SciDev.Net in the past. In this context, probably a more workable solution in this context is the formation of "coalitions" which the Concise Oxford Dictionary defines as "a temporary alliance for combined action". An alternative phrase with the same meaning is a "strategic alliance".

206. This approach takes as its starting point that potential allies want different things from each other, and that by forming a temporary output-based relationship they can achieve more together than separately. It was suggested in relation to the dossiers, that alliances in this area would enable SciDev.Net to cover more topics and gain greater credibility.

Sustainability

Sustainability of current growth pattern

207. The evidence from this review suggests that considerably more effort will have to be put into increasing both the 'quality'[62] and quantity of the audience. Greater quantity is required to increase SciDev.Net's reputation as the place to go for news about science, technology and development. And greater quality is required in order to meet its strategic objectives to meet the needs of particular geographic areas (such as Africa) and particular audiences (such as policy makers). The focus groups conclude that SciDev.Net and the services that it offers are still largely invisible to many potential users (see paragraph 75). This implies that at the very least reaching audience figures in the hundreds of thousands, rather than tens of thousands that has currently been achieved, and raising the targets substantially above the levels currently set at 3000 extra per year (paragraph 51).

208. Scidev.Net does have a recently revised marketing plan. Regional marketing consultants have been employed on a temporary basis in Latin America, South Asia and Sub-Saharan Africa. Furthermore all regional co-ordinators have marketing in their terms of reference.

209. But the results of this review suggest that SciDev.Net needs to be more creative and ambitious in its marketing. This inevitably calls for a more extensive and expensive approach to marketing. Many suggestions about how this might be achieved have been mentioned and these include: data mining, targeted marketing, developing "communities of interest" and forming strategic alliances. The focus groups also suggest linking to other sites and mailing lists, advertising in other media, running promotions, competitions, getting high profile backers, and using more well-known scientists to write for the website etc.

Sustainability of current financing model

210. Donor funding appears to be the most promising source of future funding, but it will be important to demonstrate to donors that other avenues of funding are being explored, particularly web based advertising and the expansion of sponsorship of particular services (dossiers, workshop etc).

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[62] Meaning geographic and group characteristics.

211. However there is a danger that some forms of web base advertising would bring in little revenue but would clutter the site and generally cheapen it. Even this option needs to be examined and lessons learned from those such as the New Scientist and similar newspapers which offer advertising on their on-line services[63].

212. But if donors remain the most promising source of funds in future, a strong message came through that it will be important for SciDev.Net to "make it easier for donors to fund them". This does not necessarily mean changing policy ("becoming donor driven"), but providing them with more information, properly packaged in the way that they need, and at the right time. One donor felt that "SciDev.Net is not meeting [our] mandate".

213. A number of steps could be taken to make SciDev.Net easier to fund. These might include:

a. Accepting that donors themselves are being held more accountable for the funds they disburse. This means that programme managers need SciDev.Net to give them the 'ammunition' to make the case to their superiors who control the purse strings. For some donors this process will be helped by summarising SciDev.Net's next strategy in the form of a Logical Framework, showing outputs, indicators of achievement by date and the assumptions underlying the choices being made.
b. Providing clear justification for all actions and expenditures in terms of their strategic purpose. For instance this might involve demonstrating why spending money on China is justified in terms of SciDev.Net's strategy and is not at the expense of taking funds away from Africa
c. Demonstration that SciDev.Net is contributing to meeting the donors' objectives. This may well involve making more explicit the model (or hypothesis) describing how SciDev.Net believes its activities contribute to poverty reduction, and meet the needs of poor people[64]. Difficult as it may be to demonstrate impact on these types of objective, those implementing agencies that can do it are likely to be more easily funded by accountable donors in future.
d. Investigate whether more 'news stories' can be generated from DFID funded research in the country in which the research takes place[65].
e. Keeping the donors informed of activities and developments before they happen.
f. Recognise that donors do talk to each other and resent being played off one against the other.
g. Demonstrate that serious attempts are being made to investigate and where feasible generate additional revenue streams to cover costs (this might involve the feasibility of selling advertising, or obtaining sponsorship of particular activities.

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[63] http://www.newscientist.com/home.ns. An example of sponsored web page with adds from Google is provided by http://www.innovations-report.com/html/reports/studies/report-42380.html -

[64] Where the donor is interested in research output, it may be possible to show that certain activities of SciDev.Net is essentially research – for instance research to find out what sorts of information policy analysts and decision takers want.

[65] Reference is made here to DFID as this is an area mentioned by them, but it presumably applies to the activities of other donors who finance scientific and technological activities for development.

Sustainability and free access

214. Strong opinions were also expressed by parts of the respondent sample (including some trustees and some donors) about the need to increases audiences that were able to pay subscriptions – particularly the richer sections of Latin America, South Africa, India and China. The donors stressed these views too, but at the same time they remain convinced of the importance of delivering a free service to people and organisations who cannot afford the expensive subscription services of scientific journals and other services. Donors' concern seemed to focus on their reluctance to see 'their funds' being used to subsidise those with an ability to pay[66].

215. At first sight differentiating the site's users between payers and non-payers would appear difficult not least because significant numbers of people on the register of users are located in developing countries but use northern based service providers, or are 'northern people' located in the 'south'. However many publishers already use systems of Internet Provider recognition and authentication to differentiate between different categories of user. For instance the Programme for the Enhancement of Research Information (PERI) controls access by means of IP address ranges of each country. In their case all developing country ranges have automatic recognition and access, whilst those from 'developed countries' are 'barred'.

216. But it will be essential for SciDev.Net to be able to show its donors that these techniques have been explored seriously and the feasibility assessed of generating an additional cash flow by differentiating between audiences that pay and those that do not[67]. Even so, it may be concluded that other sources of finance for SciDev.net are easier to obtain relatively to their cost.

Organizational sustainability

217. The prospects of SciDev.Net continuing sustainably into the future appear good. The need is there, SciDev.net has developed many of the capacities to meet that need, and the prospects of future funding are promising. While it is likely that SciDev.Net will change shape as it grows, there would seem little advantaging in merging with any other organisation (or indeed prospect of it being taken over by one).

218. Two aspects of organisational stability have emerged during the review. First is the concern with "succession planning", and the second is about the tension between delegation and quality. Both of these issues will be discussed further in Chapter 6, but neither is insurmountable and neither seems likely to threaten the long term sustainability of SciDev.Net.

Prospects for alternative financing models (service fees for some services, some users; publications; advertisements).

219. While it will be important for SciDev.Net to actively pursue a financial model that increases revenue streams from sources other than the main aid donors, this review

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[66] This point is given more credence by the fact that the focus group in China reported that "natural science-related participants say they do not use or will not use the full-text Science or Nature papers available through SciDev.Net, because they can access the two journals easily when they want to read their papers".

[67] This concern to show that other all sources of finance have been explored was raised by one of the donors and one of the trustees. It also arose in the context of competitors being willing to explore cost recovery models of finance.

concludes that this will not be easy. Certainly Scidev.Net might in future seek the services of more individuals who are commercially orientated in order to obtain a new perspective.

220. Discussions suggested that the most promising area for additional financing would appear to through seeking sponsorship of particular activities, or particular communication products (such as dossiers on a particular topic, workshops or conferences). Additional funds of this type are also likely to flow from strategic allies who are willing to provide co-financing or fees for particular SciDev.Net services.

221. SciDev.Net has already embarked on this process with the sponsorship of one Dossier by Schlumberger, and an association with the CGIAR.

Long term development

How will SciDev.Net adapt to changing technology?

222. By its nature changes in technology are difficult to predict. But it is certain that even over the next five years there are likely to be many changes to the technology that SciDev.Net uses or could use. The key, as always, remains being alert and being flexible.

223. From the very partial evidence of this review it seems likely that the technology for all forms of "interactivity" will improve and fall in price. Similarly there is a clearly observable trend of rapidly falling costs associated with the creation and dissemination of moving images and sound broadcasts (podcasts). These, as with all other technical change, will prose both opportunities and threats for SciDev.Net. They offer the opportunity for decentralised and 'distributed' operations (much material, such as key lectures and discussions, is now made accessible on the web within minutes of having taken place). But they constitute a threat in that many organisations are already producing this type of material in ways that make it very accessible to others.

How will external environment and competition change?

224. Again it is difficult to say more about the long term development of the external environment than has been said already in other sections of this report. There is every reason to believe that competition will intensify, and the 'information overload' will rise exponentially. Such changes suggest that SciDev.Net role as a quality assured gateway to certain types of information will become more valued, as will be the need for SciDev.Net to define and occupy its own particular niche.

How will user needs change?

225. Probably the surest indicators of the changing needs of users are provided by the Focus groups. As development occurs a large part of the audience will want to control its own destiny and will resent the imposition of values from 'overseas' as expressed in the Indian focus group. But at the same time, populations are likely to polarise, with one part of the population adopting "global norms and values" while others experience greater exclusion and poverty. The needs and aspirations of the latter group are likely to be location specific, and require knowledge that is well 'behind' the technological frontier (as exemplified, in a somewhat different context) by the focus group in Uganda asking for more information "*on older science and technology, which would be more relevant to practitioners in Africa*".

How will donor environment change?

226. It is almost certain that in the next 5-10 years that the aid business will change dramatically, both in terms or architecture and in terms of priorities (and fashions). It

seems probable that aid architecture will move towards a greater role for multilateral aid, rather than bilateral aid. And this in turn will result in more budgetary assistance to 'good governments', rather than projects. In the shorter run it is to be expected that donor agencies are likely to work more closely together. Although this has been promised for over thirty years, there does seem to be a recurrence of interest in these issues, not least as aid budgets rise while agency staff numbers fall. For SciDev.Net it seems likely that the funding round after next is likely to require satisfying a number of bilateral agencies working in concert, possibly through organisations such as IFORD (the international forum of research donors).

227. But many of these trends in official assistance will be countered by a rapid increase in large scale philanthropy from both wealthy individuals and the "social investment" of corporations.

228. Funding will probably be no more difficult in future than it has been in the past.

5 Achievements relative to the objectives listed in both its original business plan and in its Strategic Plan for 2004-2008

Summary

229. SciDev.Net's Strategic Plan for 2004-2008 took forward most of the ideas that were contained in the original business plan[68]. While neither document contained so-called SMART objectives (specific, measurable, achievable, realistic and time bound), it was possible to construct a matrix based on the Strategic Plan showing Proposed Outputs, Quantitative targets (if any), targets dates, and achievements to date.

230. This is shown in the table in Annex 2. The senior staff at SciDev.Net agreed that the proposed outputs did indeed reflect all the commitments made in the strategic plan, and then they did their best to describe achievements to date in the appropriate column[69]. Clearly as SciDev.Net is currently only halfway through the period, it is to be expected that some of the targets will not yet be met.

231. While there is valuable information in all the boxes of the table, the overall impression is that most of the objectives have been achieved or are well on target to be achieved. Some targets, such as targets for new registrants appear very modest. While some others appear to have been met in 2003, before the start of the Strategic Plan[70]. Interestingly those areas that appear not to have been achieved were also identified as weaknesses in the focus groups (even though they would not have been aware of the plans or targets).

232. Progress has been less than expected in the following areas:

- Partnerships, while partnerships have been established with Nature and Science, and SciDev.Net also benefits from the active support of the a number of institutions including the Academy of Sciences for the Developing World, (TWAS), based in Trieste, Italy. Collaborations (strategic alliances?) have also been formed with the CGIAR and WFSJ. No other partnerships have been formed[71].

- No targets were set for increasing the voice of the developing world in key debates, by increasing engagement with scientists, policy experts and others in developing countries. Progress has been made with most commissioned articles being from scientists, policy makers and others in the developing world[72]. However no measurements were available of the proportion of developing country authors on the website. The target for developing country membership of the advisory panels

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[68] SciDev.Net Five-year Strategic Plan (2004–-2008) September October 2003.

[69] The "evidence" on which the conclusions of this chapter are based on the responses provided by SciDev.Net to the matrix in Annex 2.

[70] The Kampala workshop (on HIV/AIDS reporting) was repeated in India as planned in November 2003.

[71] See paragraph 205.

[72] See paragraph 101.

is now set at 50%, though again there was no data in the matrix to demonstrate whether or not this target had been met.

- No national chapters have been created, and the trustees have "decided not to take any action for the time being on creating national chapters"[73]..
- Although the plan states that Editorial responsibilities "may" be devolved, this has not yet happened to any significant extent.
- Targets for new dossiers are more or less on target with 13 being produced by the end of 2006, rather than the 14 that were targeted.
- Three additional "quick-guides" were planned each year. A total of four have been created so far but the lack of other guides is said to have been compensated for by "news focuses".
- The number of news items on the site has slowed after 2004. SciDev.net management now regard the 2005 target as "excessive" in the context of available resources[74].
- Plans were made for additional functionality of the web site including "electronic resource areas". There has been limited progress (one achieved and others under discussion). Although a permanent facility on the website for informing senior policy makers has not yet been introduced, several "micro-sites" addressing these issues have been launched around specific events. These included a meeting on science policy in Africa in London in February 2005, and a subsequent meeting Dakar, Senegal, of African ministers of science and technology. A similar micro-site is being prepared to cover the African Union summit meeting due to be held in January 2007 with the topic "science, technology and innovation".
- With Fund raising, external sponsorship has been obtained for one dossier, but no policy has been reached on paid announcements, no action has been taken on paid subscriptions, external sponsorship has been raised for some events and professional advice has been taken on fund-raising.

233. It is clear from discussions with DFID at least that the targets and indicators used in the matrix will not be sufficiently detailed to give comfort in future to donors such as themselves who are increasingly being held to account for their grants to organisations such as SciDev.Net. As discussed in Chapter 6, there would be considerable advantage to SciDev.Net to summarise its strategic plan in terms of a "logical framework" not only for trustees and management to monitor progress, but also to provide donors with the level of accountability that they increasingly want.

[73] See annex 2, item 6.3.

[74] See annex 2, item 7.1

6 Improvements in the internal governance of SciDev.Net

Management

234. The evidence from the donors, the focus groups and on-line questionnaire give a widespread impression that SciDev.Net is now well established. But there is an equally widespread impression that there is much more that could and should be done. In the words of DFID there is a need to 'move up into the next gear'. The innovative idea of one person now needs to evolve into a more mature and sustainable organisation. This will require a number of changes, all of which have been anticipated by the trustees in the questions they pose in this chapter.

235. In terms of management it would appear that the expansion of the organisation in the next phase will a greater degree of delegation both to "departments" in the head office, and to various parts of the wider network. This process needs to evolve over time, but a clear time line needs to be developed so that progress can be monitored and a sense of forward movement achieved.

236. The issue of delegation of responsibility raises some of the issues of 'control' and quality assurance raised previously in relation to partnerships and alliances. Again these are valid concerns, but reputational risks arise both from delegation and from failure to delegate. As suggested earlier the impression of northern dominance is currently a major risk to the reputation of the organisation.

237. While there is no value in being too prescriptive at this stage, the evidence from this review would suggest that management should evolve towards the creation of a Senior Management Team made up of the Director and four department heads, covering topics such as Science and Technology News, in-depth policy products ("dossiers") and the associated communities of practice, marketing, and operations. Given past difficulties in creating partnerships consideration might be given to obtaining the additional skills necessary to identify, negotiate and manage strategic alliances – that is an 'external relations' manager.

Organizational assessment

Efficiency and effectiveness of secretariat

238. In the time available it has been difficult to investigate the efficiency and effectiveness of the staff in London with any thoroughness. The staff is enthusiastic and the evidence of this review demonstrates that it has achieved a great deal in terms of building SciDev.Net's reputation and in building the infrastructure of stringers and consultants across the world. Those areas of weakness that have been identified, such with the dossiers and marketing, are less to do with the individuals involved and more to do with changes in staff or lack of funds.

239. SciDev.Net, like any other small organisation is likely to suffer from a relatively small staff having to do too much. The staff of such organisations often seek a period of consolidation and a rest from the inevitable process of change and new initiatives. Furthermore the pressure of day to day work also makes it difficult to find the time to

consult and plan together. These issues will need to be addressed in terms of work load, clarity of function and delegated responsibilities.

Leadership

240. The success of SciDev.Net has been due in very large part to the drive, enthusiasm and vision of the Director. This will need to continue, but expansion and growth is likely to require a different form of leadership. This will be more strategic and will involve managing others rather than writing and reporting.

241. Leadership will also be required from department managers and staff (now exclusively part-time consultants) in the regions. This will require conscious efforts to develop the managerial skills of those already in these posts or the recruitment of people with the necessary skills and experience.

242. An important characteristic of some of these posts is that people involved need to have the skills and experience to earn the respect of the various client groups with whom they interact.

Network management

243. Much of the evidence from the various surveys indicates important issues about the management of the various networks that need to be considered by trustees and management. These include how to manage and achieve:

- Greater interactivity
- Greater local 'ownership'
- Greater local content.

244. As the organisation expands such tasks are likely only to be achieved through greater delegation, clarification of roles and responsibilities, and either more full time staff or greater collaboration with other organisations.

245. Some of these procedures are already in place or are being developed. These include the procedures under which quality assurance is delegated to staff in the network (for instance to cover materials produced in Chinese – which no one in the Head Office staff can read). Similarly a start has already been made for clarifying the procedures for commissioning work so that it too can be delegated to Regional Co-ordinators (for instance within Latin America). It is likely that a timetable to roll out these procedures in other regions needs to set out and implemented.

Is the current organizational structure optimal and how can it be improved?

246. The current organisational structure appears to have worked well. But it is unlikely to remain optimal as the organisation expands and evolves. A major element of the next strategic plan will the design and implementation a new organisational structure that can cope with the delegation of responsibilities to the regions but at the same time keep the reputational risks to SciDev.Net within acceptable limits.

247. The elements of such a structure are implicit in what has been said before: a head office with a properly functioning Senior Management Team, and adequately resourced Regional Coordinators, with clear functions, sufficiently delegated power, and effective quality assurance processes.

Sustainability

248. Sustainability of the management system will be in large part be a function of adequate funding. This is dealt with elsewhere. It will also be a function of successful 'succession management'. Certainly the current operation is highly dependent on the efforts and skills of the Director.

249. The issue of succession management has understandably been raised by both donors and a number of key informants. The trustees believe that if the Director or any of the other senior staff were unable to perform their work, the existing staff, strengthened by temporary staff would be able to run the business in the short run (even though it would be a struggle). In the longer term, a recruitment process would be put in place and relevant staff hired.

250. But in addition to this it seems likely that both trustees and donors would like to see a system put in place, as described above, in which the skills of other staff are developed so that certain key tasks currently undertaken by the director can be delegated to them. This implies that the director should increasingly focus on strategic concerns and managing others, with other people taking on more of the hands on editorial and writing functions.

Governance

Effectiveness of current governance structure

251. The current governance structure is consistent with and similar to the structures used by most British Charities, namely a board of trustees who have ultimate responsibility for the operation of the charity in accordance with its objectives (as set out in the charity's Memorandum and Articles of Association. This board delegates certain functions to a chief executive or director, and to an executive committee made up of trustees which convenes electronically with the Director as required (usually quarterly).

252. The International nature of SciDev.Net means that most of the board members are not resident in the UK, and this in turn means that the Board meets far less frequently than would be usual for a UK charity, namely quarterly.

253. A number of key informants suggested that the role of trustees and management had not always been entirely clear at SciDev.Net and this may have resulted in some decisions of the Board being delayed or not implemented.

254. This is quite common and in most British Charities there is frequently a tension between the role of the trustees, and the Management. Although the trustees are alone responsible for the Charity, they perform the role of "critical friend" to the Director, to whom the Board delegates responsibility for the management of the charity. In order for this to work properly, the roles and responsibilities that are delegated by the trustees to the Director should be set out in writing. This conventionally includes the task of implementing a detailed (annual) work plan within the confines of a detailed budget both of which are agreed in advance by the trustees.

255. Under these arrangements it is important for the trustees (and executive committee) to make clear when it is issuing an instruction to the Director, and when it is offering more general comments or 'things to think about' (which he/she can take or leave). It is considered good practice for instructions, and actions agreed by the Board to be recorded in formal minutes (usually drafted by a clerk or secretary, and agreed first by the Chair, and then by all the trustees).

256. Sub committees of the Board, such as the Executive committee, should have clear written delegated powers, but in all other cases they are advisory to the main board of trustees.

257. The Executive sub-Committee of the trustees should not be confused with the Senior Management Team: the first governs and the second manages.

258. Although donors may be members of the Board of a charity, it is increasingly the case that they are not (DFID now does not allow its staff to be members of Boards of entities that it supports financially though project finance – this clearly does not apply to the World Bank or other international agencies). This means that special arrangements have to be put in place to ensure that donors are able to feed their views both to the board and to the management. Both IDRC and DFID mentioned that the previous consultation mechanisms were not entirely satisfactory. It may be that all that is required is a more explicit timetable for consultation from time to time, and a process that sets out the challenges and how they are being deal with rather than a demonstration of achievement. This appears to have taken place successfully in recent discussions with DFID.

259. This relationship is often difficult because the recipient of funding often believes that they must impress the donor, whereas the donor usually wants a realistic assessment of what is going on, and if there are problems, to know how they are being dealt with.

Governance relationships between HQ and regional coordinators

260. There was little evidence during the review of the existence and functions of the Regional advisory groups. They are not visible on the web site, but do appear to offer advice both to the Regional coordinators, the trustees and the management.

261. From what has been said so far, the Regional Advisory Groups could play an important role in increasing the sense of ownership of SciDev.Net in the Regions and forming part of the delegated quality assurance function.

How can the various parts of the organization be better linked?

262. At various points in this review points have been made about the communication between the Centre (London) and the periphery, and the delegation of responsibilities between the centre and the regional co-ordinators. Until now most of these systems have centred on the Director. It is the essence of this chapter to suggest that as the organisation matures, it will have to evolve to a more distributed model, with decisions delegated first to a senior management team and second to the regions. A major challenge of such a distributed model will, however, be to set up systems to facilitate effective communication between all the elements of the system so that synergies can be exploited. For instance, the generation of dossiers (particularly if there were 12 ‘dossier-lite’ per year) needs to be linked both to the marketing strategy, and to events in the regions. Similarly it is likely that the knowledge and experience of the various advisory groups (at the level of both regions and dossiers) will need to inform both marketing and quality assurance across the whole canvass of Scidev.Net.

7 Conclusions

Overall Conclusions

263. Throughout this report the aim has been to let the evidence speak for itself. But on the way a few strategic options have emerged. The purpose of this chapter is to draw out these conclusions and list more assertively that the trustees and management need to address.

264. Science, Technology and Development are back on the development agenda, and SciDev.Net has harnessed modern technology to effective communicate about them.

265. In future it will be important for SciDev.Net to maintain and further develop the reputation it has already established for reporting science news relevant to development that is both high quality and accessible to non-specialists. This is SciDev.Net's niche which should remain un-compromised at the core of the next strategic plan.

266. SciDev.Net has done well to establish its reader base, but the need in the next phase will be to increase the readership substantially through a larger scale and more active and intensive marketing strategy. Absolute numbers need to be increased to enable Scidev.Net to occupy its territory more visibly and become the site of first choice for science, technology and development. But at the same time it will need to improve the 'quality' (or characteristics) of it audience. This will require expanding its readership in particularly difficult areas, such as in Africa, and to particular audience segments, such as policy makers and analysts.

267. This report concludes that there are seven key areas of action that need to be addressed.

Segment the audience

268. The report argues that SciDev.Net will be able to achieve greater clarity of purpose by dividing up the potential audience into separate segments and determine the communications products that best meet the needs of each segment. Such segmentation will make it easier to allocate resources strategically and to monitor performance.

"Engage"

269. There is a strong demand on the part of the audience for greater engagement. At one level this is a desire on the part of the audience for greater interactivity with each other and with SciDev.Net. But above all else it is a need for SciDev.Net to become more engaged with a number of these audience segments to understand more fully what issues concern them and what their communication needs are.

Take an "evolutionary approach" – test and amend

270. A central approach to finding out which communications products suit a particular audience should be a more explicit process of testing a range of possible products, investing to find out the extend that they meet the needs of the audience, and then improving them in the light of this experience. Such an approach will be particularly important in the area of dossiers which are currently not meeting the needs of the policy segment effectively.

Form "strategic alliances"

271. In order to expand, to cover the ground, and to increase credibility with policy makers and analysts SciDev.Net will need to cooperate with other organisations, particularly those that are already seen to credible by the market segment. While there will be genuine issues of maintaining quality standards, forming 'strategic alliances' to carry out specific tasks jointly may be a more effective approach than the formation of 'partnerships', which have been associated in the past with losing control of important quality assurance processes.

'Localise'

272. There is a strong demand from the audience for more localised material about their own concerns and areas of interest, including the individual circumstances of their own countries. In future this will require a more 'distributed' model for SciDev.Net and a delegation of responsibilities to staff and other organisations in the regions. The current model is threatened by the perception that it is a centralised organisation run from London that is telling developing countries what they need to know[75].

Reconsider Communications Products for Policy Audience

273. The dossiers remain a problem. SciDev.Net has not yet found communications products that best meet the needs of the audience segment associated with policy makers and analysts. This remains an important audience that SciDev.Net should address. But rather than re-launching the dossiers, it is recommended that this range of activities is re-considered from first principles. The following suggestions emerge from the evidence:

1. Define the market segment more clearly and invest in understanding their needs for communication products
2. Consider a larger number of 'lighter' products (possibly with a more precise / narrower focus), so that at least one can be launched every month in association with a marketing effort (so that this area of the site has something new to say every month).
3. Link some of the dossier to upcoming events and at the appropriate time
4. Consider periodic, rather than continuous up-dating, and only if demanded by audience
5. Consider re-emphasising SciDev.Net's strengths relative to other producers of 'policy briefings', by focussing on recent scientific and technological news, and by emphasising the 'scientific and technological' angle
6. Form alliances with organisation who are already considered credible by the target audience to jointly produce and finance dossiers (retaining responsibility for final drafting, style and production)
7. Seek sponsorship for some or all of these products
8. Give more prominence on the site to the quality assurance processes involved with these products to reassure the potential reader on arrival at the site/document – if necessary reform the advisory groups and ensure that they are seen to sign off dossier content.
9. Make the sources of material more explicit and emphasise the credibility of sources
10. Make the commissioning processes clearer to the audience and potential contributors.

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[75] Even in an international organisation based on communication, it is likely to remain the case for the next few years at least that many tasks are more easily performed from a location in 'the north'.

11. Increase the local content in part by separating (and clearly labelling) fully quality assured material for less assured material
12. Make the dossiers easier to print out.

Make SciDev.net easier to support.

274. There are a number of actions that SciDev.Net can take to make it easier for donors to support them, but without compromising SciDev.Net's strategic focus. These range from generating the evidence that the donors need to justify their expenditures, to doing things that more explicitly respond to the donor's mandate. This particularly applies to activities and audiences that are more directly linked to poverty reduction (such as providing communications products for school teachers and children).

Be Strategic

275. In the next phase it will not be possible for Scidev.Net to do everything. This requires more explicit linking of possible expenditures to the achievement of SciDev.Net's central strategic objectives. This in turn will require a more explicit 'programme logic' that specifies the model (or hypothesis) describing how SciDev.Net believes its activities contribute to changing behaviour, and ultimately reduce poverty and meet the needs of poor people.

276. While much criticised, the Logical Framework used by many donors does provide an effective way to summarise these strategic objectives, and to make explicit the timing of specific actions required to achieve them.

277. Defining the specific Logframe 'outputs' in terms of SciDev.Net's principal audiences is likely to facilitate this process and add clarity to allocation of financial and other resources to strategically essential activities. In this context outputs should be defined in terms of

- the general public (who of course do put pressure on policy makers);
- the scientific community,
- policy makers and policy analysts, and

278. Other outputs may need to be clustered round a fourth output related to capacity building, both for Scidev.Net as an organisation and for segments of the audience.

279. More sophisticated output based approaches have recently been developed by DFID, IDRC and others under the label of "Output Mapping". This makes the programme logic clearer by focussing on 'behaviour changes' and the organisation's contribution to change[76].

Future Funding

280. The overall conclusion is that SciDev.Net's past performance and the rising need for communications about science, technology and development are likely to justify future support from the donor community and from other possible sponsors.

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[76] A 4-page summary and supporting materials is available at http://web.idrc.ca/en/ev-26586-201-1-DO_TOPIC.html .

ANNEX

An External Review of SciDev.Net: the company and its website

August 2006

by

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This report was produced under contract between SciDev.Net and The Policy Practice Limited and was funded by the UK Department for International Development (DFID), for the benefit of developing countries. The views expressed are not necessarily those of DFID or SciDev.Net.

Contents

Annex 1. Terms of Reference

AGREEMENT BETWEEN THE SCIENCE AND DEVELOPMENT NETWORK (SCIDEV.NET) AND THE POLICY PRACTICE CARRYING OUT AN INDEPENDENT EVALUATION OF SCIDEV.NET AND ITS WEBSITE

INTRODUCTION

This specification confirms the terms under which the Consultant has agreed to carry out an independent evaluation of the Science and Development Network (SciDev.Net) and the operation of its website (www.scidev.net).

1. Scope of evaluation

The purpose of the evaluation is as follows:

- To assess how far the organisation has achieved the broad objectives identified in its original business plan and in its Strategic Plan for 2004-2008;
- To evaluate whether the grants awarded to SciDev.Net since 2001 been used effectively and for the purposes for which they were awarded
- To identify SciDev.Net's opportunities for future growth and for increasing its contribution to development goals;
- To indicate actions that may be required to increase the prospects for SciDev.Net’s financial sustainability?

A more detailed breakdown of the topics and questions to be addressed by the evaluation, dividing these into core, secondary and additional issues, is attached as Part 1 to the Appendix.

2. Delivery format

All reports and other material will be delivered to SciDev.Net as electronic files sent as e-mail attachments.

3. Delivery timetable

The Consultant will provide material to SciDev.Net according to the timetable detailed in Part 2 of this Appendix below.

4. Intellectual property

The copyright of all the material produced or commissioned by the Consultant under this contract will be the property of SciDev.Net as set out in the body of this contract.

Payments

Payments will be based on a schedule detailed below in Part 3 of this Appendix.

Appendix: Part 1

Detailed topics/questions (ranked by priority area)

	Topic	Key questions
	Core issues	
	Content	• Is the website content seen as authoritative and useful? • Which parts of the content are seen as stronger/weaker? • How can content be made more relevant to development goals? • Would a similar service focusing on health research be valuable?
	Reach/ Users	• Who uses SciDev.Net? • How do they use it? • How can the value be increased? • Has SciDev.Net reached its target users – and if not, why not?
	Dossiers	• Who uses the dossiers? • Which are most used and valued? • Is their content seen as relevant and of high quality? • What improvements could be made to dossier format? • How can the range of users be increased?
	Outcomes/ impacts	• What impact has SciDev.Net has on: • Knowledge and awareness of users; • Public policy, including S&T decision-making in developing countries; • Science journalism in developing countries; • Donor agency agendas and development goals.
	Secondary issues	
	Regional gateways	• Who uses the regional gateways? • Is their content relevant to regional interests?

	Topic	Key questions
		• How can effectiveness of regional co-ordinators be increased? • How can the role of regional advisers be improved?
	Capacity building	• How effective are our science communication training workshops? • Is there a role for SciDev.net in organizing workshop for aid agencies about role of science in developing strategies?
	Governance	• How effective is the current governance structure?[77] • Could the various parts of the organization be better linked, and if so, how?
	Sustainability	• How can the organisation best ensure its sustainability? • How sustainable is the current financing model, including free access? • What other forms of financing might be appropriate?
	Additional issues	
	Organizational assessment	• How effective is the staff and secretariat? • How well are the networks managed? • How could the organizational structure be improved?
	Networking	• Are there regional/country networks that are stimulated by SciDev.Net?
	Long term development	• How can SciDev.Net adapt to changing technology? • How can it adapt to changes in the environment and competition? • How will the needs of its users change? • How will the donor environment change?
	Competitive environment	• Who are the potential strategic partners for SciDev.Net? • What is the competition?

[77] Board, Regional Advisory Committees, Dossier Expert Panels; Executive Director; Regional Coordinators

Annex 2. Achievements relative to the objectives listed in the Strategic Plan for 2004-2008

Plan Para	Proposed Output	Quantitative target If any	Target Date if any	Achievement to date	Comments
1.1 6.2	Provision of reliable and authoritative information on (1)issues related to science and (2) science-based technology that impact on economic and social development (3) role of science and technology in meeting the needs of developing countries	None specified	None specified	Anecdotal and survey evidence suggests that the website currently meets these objectives, both in terms of a description of its contents, and in the positive response from users on these issues	The results of the evaluation will provide a more robust indication of the extent to which these objectives have been met.
3.6	to develop further the content of the website, including the creation of a section of the website devoted to the communication of science, to set up a regional network in South Asia (early 2004), to repeat the Kampala workshop in India, and to organise a public meeting on science and technology communication in Nairobi, Kenya.		Before march 2004	The section devoted to the communication of science was launched as planned in February 2004 The regional network in South East Asia was launched in November 2004 The Kampala workshop (on HIV/AIDS reporting) was repeated in India as planned in November 2003 The meeting on planned for Nairobi was postponed	Plans for the planned Nairobi workshop were postponed on the departure of the managing editor in August 2005
5.2	to address the delay in meeting some of the initial goals the number of dossiers produced has been significantly lower than anticipated. increasing the number of staff who will be concerned with developing our dossiers	The trustees have agreed to a target of between two and four new dossiers every year. No target has been set for staff	None set	We launched two dossiers in 2005 (R&D and Biodiversity) and plan to launch three in 2006 (Bird flu, desert science and technology transfer). A new dossier co-ordinator was	The scope and number of future dossiers is currently under review

				appointed in June 2006	
5.3 16.1 17.1	**Increase significantly the number of users of the web site particularly in Middle East and North Africa.** **Appoint marketing manager**	**Dec 2003: 8,000** **Dec 2004: 11,000** **Dec 2005: 14,000** **Dec 2006: 17,000** **Dec 2007: 20,000** **Dec 2008: 23,000** **2/3 from Idc** **visits: linear to 30,000 per week by 2008.**		**Actual registrants:** **Dec 2003: 8,318** **Dec 2004: 13,818** **Dec 2005: 20,729** **Dec 2006: 28,000 (Target)** **All these figures are considerably higher than those included in the Strategic Plan.** **The number of registrants in developing countries has risen from about 50% of the total number of registrants in 2003 to 61% in 2006.** **We are currently receiving an average of about 20,000 visitors a week to the website. The highest numbers recorded was 24,731 in the second week of March 2006.**	**Initial targets set in absolute numbers at 3,000 per year. Now increased to 7,500 additional registrants per year.** **Initial predictions were based on linear growth. In fact rate of growth has been increasing steadily**
5.4	**Increase voice of developing world in key debates, by increasing engagement with scientists policy experts others in Idc**	**No fixed targets**		**Various measures have been taken to achieve this objective. For example, most opinion articles are commissioned from scientists, policy makers and others in the developing world.** **However no measurements have been made of the proportion of developing country authors on the website**	
6.3	**Increase number and scope of Regional networks** **National chapters** **Occasional workshops**	**(1) Following the launch of the Latin American regional network in 2003, the strategic Plan suggests launching of network in South Asia in 2004, followed by regional**		**The South Asian regional network (based in India) was launched in 2004 as planned.** **It was decided to split the 'East and South-East Asia' regional network into two, one being the China regional network, and the other covering South-East Asia.**	**The regional network covering the Middle East and North Africa has been delayed primarily because of a current lack of accommodating Arabic language characters on the website, as well as a lack of resources.**

		networks in 'east and South East Asia (based in China) and the Middle East and North Africa. 2. Although the Strategic Plan mentions the possibility of creating national chapters, it does not commit SciDev.Net to doing so 3. No targets were given for occasional workshops		The China Network was launched as planned in June 2005. Plans to launch the Middle East regional network were deferred from 2005. The trustees have decided not to take any action for the time being on creating national chapters. Details of the number of workshops is provided separately	This website capacity is currently being rectified, and provided that funding can be found, the Middle East and North Africa regional network will be launched to coincide with the 2007 Annual General Meeting, which takes place in Cairo in May 2007.
6.4 6.5 6.6 10.2	Additional functionality of the web site including “electronic resource areas” (1)“science and technology communication” (2)senior policy makers, diplomats and “science negotiators” in developing countries (2a) joint project developed (para 10.4) (3) data base on funding opportunities (4) how to apply for grants (5) fellowships etc		No specific target dates	The first 'electronic research area', which became known as the e-guide, was launched in February 2004. Plans for a website to inform politicians and government decision-makers in Africa are currently being discussed with the UK Parliamentary Office of Science and Technology	Although a permanent facility on the website for informing senior policy makers has not yet been introduced, several "microsites" addressing these issues have been launched around specific events. These included a meeting on science policy in Africa in London in February 2005, and a subsequent meeting Dakar, Senegal, of African ministers of science and technology. A similar microsite is being prepared to cover the African Union summit meeting due to be held in January 2007 with the topic "science, technology and innovation".
6.7	Increase in marketing strategies in developing countries	No target dates have been set		New marketing strategies have been developed, and regional marketing	Marketing strategy is still under development. However

				consultants have been employed on a temporary basis in Latin America (Paula Leighton), South Asia (Sridevi Sunderarajan) and Sub-Saharan Africa (Liz Nganga)	in 2006 for the first time, all regional co-ordinators have been given clear marketing objectives in terms of increased registrants on
6.8	Continuously evaluate impact on "this audience"	No specific targets set	No specific targets set	Electronic surveys of SciDev.Net registered users were carried out in May 2004 and May 2006. An independent evaluation was carried out in June – August 2006 involving a series of focus groups in different parts of the developing world, and telephone interviews with a range of key stakeholders and others	
7.1	Increase steadily number of news items on the site	Currently 40-45 month No specific goals were set in the Strategic Plan.	The target for the end of 2004 was 13-14 articles per week, The target in the 2005 Workplan was 20 new items a week.	The 2004 was exceeded when we reached 15-16 news articles a week at the end of the year. By the end of 2005 we were publishing about the same number as in 2004, but the proportion contributed by our own correspondents had increased significantly.	Although the 2004 target was reached easily, the 2005 target was considered to be excessive in the context of our available resources
7.4	Establish partnerships with local media	No specific targets	No specific targets		
7.6 7.8	Consider charging for reproduction of material by developed countries. Will Explore ○ news as source of income fellowships for science journalists ○ free access to material from additional sources			This issue has been explored as promised, although no action has been taken. The first science journalism fellowships are being introduced with the support of IDRC next year. Discussions have been held about obtaining free use of material from various biomedical journals.	
8.5	New dossiers	Two by Dec 2003 2-4 new dossiers pa.	Dec 2003: 8 Dec 2004: 10 Dec 2005: 12	We currently have 12 dossiers functioning on the website, and will	

			Dec 2006: 14 Dec 2007: 16 Dec 2008: 18.	add one more by the end of 2006	
8.6	New Quick guides	Three by Dec 2003 Three each year.		We currently have four quick guides on the website, which will become 'topic guides' at the end of 2006	Lack of quick guides has been compensated for by "news focuses"
8.8	Increase proportion of ldc experts on panels	No specific targets	No specific targets		Our current goal is that 50% of the members of each advisory panel should be from the developing world.
9.1	Expansion of Regional gateways	No number given		The Latin America gateway was expanded with the introduction of Spanish and Portuguese versions in May 2003 The East and South-East Asia gateway has been split into two, and the one of these – known as the China gateway – was launched with a Chinese language version in June 2005,	The opening of the Middle East and North Africa gateway is dependent on the ability to handle Arabic characters. This will be introduced on the website in December 2006.
9.7	Editorial responsibilities "may" be devolved.	No specific targets	No specific targets		
9.8	(1) local funding explored	No specific targets	No specific targets	Local funding has been raised for events in Latin America (particularly Venezuela and Colombia) and China.	So far, the amount of local funding raised has been relatively small, and focussed on 'add on' activities, such as workshops and the e-guide to science communication
11	Web lay out and design to be gradually improved	"no major redesign planned"	No specific targets	Various measures were taken to improve the performance of the website in 2005, following the transfer to a new website developer.	The content management system is currently being rebuild, and the opportunity is being used to improve the presentation and navigation of a number of individual pages
12	Regional networks developed	Uganda Brazil India China Mid east French Africa	Jan 2004 Later	Regional networks have been launches as follows: Sub-Saharan Africa (2002) Latin America and the Caribbean (2003) South Asia (2004)	The regional networks are building steadily in terms of numbers of regional users. However the size of networks of formal entities remain

		Regional advisory panels in place **Increased autonomy with mechanisms in place**	**"in long run"**	**China (2005)** **Tow more are currently envisaged:** **The Middle East and North Africa (2007?)** **South East Asia (??)** **The creation of each regional network has been accompanied by the creation of a regional advisory panel.**	**relatively low.** **Also the regional advisory panels have remained relatively inactive.** **A meeting to address issues of regional governance will take place in London in November 2006.**
13	**National chapters**	**No target set**		**No national chapters have been created**	**The trustees have decided at successive annual general meetings not to make the creation of national chapters a high priority for the organisations**
14	**Partnerships**	**No target**		**Still under discussion**	
15	**Capacity Building** **training** **Reports of meeting on the web**	**No more than 10% of budget in year one**		**A series of training workshops have been carried out. In particular, three workshops have been organised from the main office on reporting HIV/AIDS, one on general science reporting, and one on reporting on malaria research.** **In addition, the Latin American regional network has acted as a co-sponsor of various regional workshops for science communicators**	**The anticipated expenditure on workshops for 2006 is £35,000, which is about 5% of the total planned expenditure.**
16	**Marketing** **exchange advertising considered** **increase in news feeds** **Media on other media (radio)** **Promotional material** **E-mail drives** **Paid advertising in other media** **Purchase of circulation lists** **Monitoring impact of marketing**			**New marketing strategies have been developed. Marketing strategy is still under development (see 6.7 above).**	
18	**Monitor** **impact**	**No specific targets**	**No specific targets**	**Electronic surveys of all users were carried out in 2004 and 2006.**	

18.3	**demand**			**A major independent evaluation was carried out in the summer of 2006.** **No assessment of demand has been made outside these projects**	
19	**Governance** **revised governance structure** **risk management strategies in place**	**No specific targets**	**No specific targets**	**The governance arrangements have been kept under close review, and a major meeting to address governance issues is planned for November 2006.** **A risk management summary has been created as is reviewed regularly by the trustees**	
20	**Staff**	**From 6 to 10**		**SciDev.Net currently has 10 full-time staff as outlined in the Strategic Plan.**	
21	**Financial**	**From £825K to £1.12m in 2008**		**SciDev.Net's expenditure was as follows:** **2004: £622,156** **2005: £734,622** **2006: £900,000 (est)** **2007: £1 million (est)**	
22 24	**Fund raising** **(1)Ethical fund raising guidelines in place** **(2) sponsorship of sections** **(3) paid announcements** **(4) subscriptions considered from developed world** **(5) increased sponsorship of events** **(6) take professional fund raising advice**	**Additional funding sources secured**		**Brief ethical guidelines have been agreed by the trustees** **External sponsorship has been obtained for one dossier** **So far no policy has been reached on paid announcements** **No action has been taken on paid subscriptions** **External sponsorship has been raised for some events** **Professional advice has been taken on fund-raising**	
23	**Reserves**	**3 months operating costs covered by unrestricted funds**		**Our financial position is constantly monitored to ensure that it meets the requirements of our reserves policy.**	

Annex 3. Principal People Interviewed

Key Informant Interviews

Staff at SciDev.Net:
David Dickson, Director
Mike Shanahan, News Editor
Ken Blake, Web Production editor
Jemimia Tonks, Marketing manager
Karen Levin, Operations Manager
Sian Lewis (new commissioning editor)

Dossier coordinators:
Eva Dantas (on the phone from Germany)
Ehsan Masood
Dominic Glover
Julie Clayton
Graham Dutfield
Johanna Wolf

Board members:
Geoff Oldham
Professor M H A Hassan, TWAS
Dr Anne Whyte, Mestor Associates
Professor Luc Soete
Nalaka Gunawardene, TVE Asia Pacific
Angela Cropper, The Cropper Foundation.
Fred Binka, University of Ghana

External Key Informants:
Erik Arnold (advisory panel), Technopolis, Brighton
Geoff Barnard, Communications Director, IDS
Jo Chatterway, Open University
Kirsty Cockburn, Communications Director, ODI
Alex Duncan (advisory panel), The Policy Practice, Oxford
Richard Isnor, IDRC
Calestous Juma, Harvard
John Mugabe, NEPAD
Carol Priestly (advisory panel), former head of INASP
Prof. Judi W. Wakhungu, ACTS, Kenya
Dylan Winder, DFID
Jean Woo, IDRC
John Young, RAID Programme Director ODI

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Wikipedia, on the concept of 'communities of practice'.

Annex 5. Report of On-line Survey

By Gareth Williams, The Policy Practice

Introduction

An online questionnaire posted on the SciDev.Net website was undertaken in April/May 2006. There were 41 questions including a mix of structured and open-ended responses. The questionnaire generated 2,213 responses. This report presents the main findings for each question and provides brief commentary.

For the structured questions the tables report the percentage of the total of respondents (2,213) who selected a particular response. For many questions there were a large number of respondents who provided no answer. These are recorded as no response in the tables. The rate of non-response tended to be higher for open-ended questions and for questions at the end of the survey.

For open ended questions the most frequently expressed opinions were identified by visually scanning the responses and/or employing automated keyword counting. In general responses to open-ended questions are reported in rough order of importance (most frequent responses first).

Profile of respondents (Questions 1 to 4)

Question 1 - Profession

	Number of respondents	% of total respondents	% of total registrants
Aid agency official	38	1.7%	1.3%
Consultant	123	5.6%	6.9%
Government official (non-aid agency)	140	6.3%	5.4%
Graduate student	91	4.1%	6.1%
Industrial manager	19	0.9%	1.7%
Journalist	140	6.3%	6.3%
Librarian	48	2.2%	2.2%
NGO official	117	5.3%	4.8%
Physician	61	2.8%	3.4%
Research administrator	54	2.4%	2.6%
Researcher (policy)	110	5.0%	3.8%
Researcher (science)	426	19.2%	18.3%
School student	12	0.5%	1.3%
School teacher	30	1.4%	1.4%
University student	88	4.0%	6.8%
University teacher	331	15.0%	11.3%
Science communicator	111	5.0%	2.5%
Other (please specify)	231	10.4%	12.4%
No response	43	1.9%	1.4%
Total	2,213	100.0%	100.0%

NB The final column reports the percentage of all registered users of SciDev.Net (22,201 in May 2006). The comparison of the final two columns shows that the sample of questionnaire respondents was broadly representative of the wider user base. Aid agency officials, policy researchers, university teachers and science communicators are somewhat overrepresented in the questionnaire sample, whereas students and industrial managers are somewhat underrepresented.

Question 2 - Country of residence

	Number	% of total respondents	% of total registrants
Developing country	1345	60.8%	**62.7%**
Developed country	825	37.3%	**35.7%**
Not specified	**43**	**1.9%**	**1.7%**

Developing countries defined as low and middle income countries according to World Bank classification.

Comparison of the questionnaire sample with the total pool of registered users again indicates that the sample was broadly representative.

Question 3 – Age group

	Number	% of total respondents
under 25	113	5.1%
26-35	500	22.6%
36-50	765	34.6%
51-65	548	24.8%
65+	162	7.3%
No answer	125	5.6%
Total	2213	100%

Question 4 – Main geographical area of interest

Region	Number	% of respondents
China	647	29.2%
Latin America and the Caribbean	951	43.0%
Middle East and North Africa	643	29.1%
South Asia	800	36.2%
South-East Asia	848	38.3%
Sub-Saharan Africa	1126	50.9%
No response	43	1.9%

Respondents could tick multiple responses

Question 5 – Are you a registered user of SciDev.Net?

	Number	% of respondents
Registered	1920	86.8%
Not registered	250	11.3%
No response	43	1.9%

There are two (not mutually exclusive interpretations of this result): (i) the majority of website visitors are probably registered users, (ii) registered users were more willing to fill in the questionnaire.

Question 6 - How did you hear about SciDev.Net?

	Number	% of respondents
Friend/ colleague	713	32.2%
Web search	563	25.4%
Receipt of promotional material	144	6.5%
Followed link from another site	312	14.1%
From report/article elsewhere	120	5.4%
From an electronic newsletter	147	6.6%
Leaflet at a conference	17	0.8%
Presentation at a conference	34	1.5%
Other:	120	5.4%
No answer	43	1.9%
Total	2213	100.0%

It is notable that the most common means of finding out about the website was through a referral from a friend or colleague or from the results of a web search. Marketing activities undertaken by SciDev.Net (receipt of promotional material, leaflet or presentation at a conference) appear to have played a more minor role in attracting users to the site.

Question 6 - *Disaggregated by profession*

	Friend/ colleague	Web search	Received promotion-al material	Followed link from another site	From report/ article elsewhere	From an electronic newsletter	Leaflet at conference	Presentation at conference	Other (please specify)	No answer
All	32.2%	25.4%	6.5%	14.1%	5.4%	6.6%	0.8%	1.5%	5.4%	1.9%
No response	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Aid agency official	**47.4%**	*10.5%*	5.3%	*2.6%*	5.3%	**10.5%**	0.0%	**2.6%**	**15.8%**	0.0%
Consultant	36.6%	26.8%	7.3%	17.1%	*0.8%*	6.5%	0.0%	0.8%	4.1%	0.0%
Government official (non-aid agency)	**37.1%**	27.1%	5.7%	11.4%	3.6%	4.3%	1.4%	1.4%	7.9%	0.0%
Graduate student	**40.7%**	**34.1%**	*3.3%*	*8.8%*	4.4%	5.5%	0.0%	0.0%	3.3%	0.0%
Industrial manager	*15.8%*	**31.6%**	5.3%	**21.1%**	**26.3%**	*0.0%*	*0.0%*	*0.0%*	*0.0%*	0.0%
Journalist	**39.3%**	*19.3%*	7.9%	12.9%	6.4%	*2.1%*	0.7%	**5.7%**	5.7%	0.0%
Librarian	35.4%	22.9%	6.3%	16.7%	**10.4%**	4.2%	0.0%	0.0%	4.2%	0.0%
NGO official	**40.2%**	21.4%	5.1%	12.0%	6.0%	**11.1%**	0.9%	0.0%	3.4%	0.0%
Physician	31.1%	**34.4%**	*1.6%*	**19.7%**	4.9%	*0.0%*	1.6%	1.6%	4.9%	0.0%
Research administrator	33.3%	18.5%	**20.4%**	9.3%	*1.9%*	**13.0%**	1.9%	0.0%	1.9%	0.0%
Researcher (policy)	32.7%	20.9%	3.6%	18.2%	7.3%	9.1%	0.9%	1.8%	5.5%	0.0%
Researcher (science)	32.4%	29.1%	7.3%	16.0%	5.6%	4.5%	0.7%	0.9%	3.5%	0.0%
School student	33.3%	**33.3%**	*0.0%*	*8.3%*	8.3%	*0.0%*	0.0%	0.0%	**16.7%**	0.0%
School teacher	36.7%	**43.3%**	*0.0%*	*6.7%*	3.3%	10.0%	0.0%	0.0%	0.0%	0.0%
University student	27.3%	**33.0%**	*0.0%*	15.9%	3.4%	4.5%	**3.4%**	0.0%	**12.5%**	0.0%
University teacher	29.3%	28.1%	9.7%	11.8%	6.0%	**10.6%**	0.3%	0.9%	3.3%	0.0%
Science communicator	**38.7%**	*17.1%*	6.3%	10.8%	5.4%	9.0%	0.9%	**6.3%**	5.4%	0.0%
Other	*21.2%*	22.5%	6.5%	**21.2%**	6.5%	7.8%	0.9%	2.2%	11.3%	0.0%

Note: For this and all subsequent disaggregated tables the figures indicate the percentage of each type of respondent who ticked a particular box. For example, 47.4% of aid agency officials were referred by a friend or colleague to the website. This is higher than the average for all respondents (32.2%). Unusually high figures are entered in bold. Unusually low figures are entered in italics.

Some interesting patterns emerge from this table:

- Aid agency officials, government officials, NGO officials, graduate students and science communicators are more commonly referred to the website by friends or colleagues than other types of user.
- Students, physicians and industrial managers tend to find SciDev.Net more commonly through a web search than is typical of other types of user.
- Research administrators most commonly report that they were referred to the website through promotional material in comparison to other types of user.
- Electronic newsletters are a more common route to the website for Aid Agency Officials, NGO officials, research administrators and university teachers than for other types of user.
- Aid agency officials and science communicators more frequently hear about SciDev.Net from presentations at conferences than for other types of user.

Disaggregated by country

	Friend/ colleague	Web search	Received promotion-al material	Followed link from another site	From report/article elsewhere	From an electronic newsletter	Leaflet at conference	Presentation at conference	Other (please specify)	No answer
All	32.2%	25.4%	6.5%	14.1%	5.4%	6.6%	0.8%	1.5%	5.4%	1.9%
Developing country	32.4%	28.7%	6.9%	12.3%	5.4%	6.9%	1.0%	1.7%	4.8%	0.0%
Developed country	33.6%	21.5%	6.2%	17.8%	5.8%	6.5%	0.5%	1.3%	6.8%	0.0%
No response	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

There do not appear to be major differences between developing and developed country users in terms of how they found about SciDev.Net

Disaggregated by area of geographical interest

	Friend/ colleague	Web search	Received promotion-al material	Followed link from another site	From report/article elsewhere	From an electronic newsletter	Leaflet at conference	Presentation at conference	Other (please specify)	No answer
All	32.2%	25.4%	6.5%	14.1%	5.4%	6.6%	0.8%	1.5%	5.4%	1.9%
China	30.6%	22.6%	6.8%	16.5%	6.0%	7.7%	0.5%	1.9%	7.4%	0.0%
Latin America and the Caribbean	32.9%	23.2%	6.7%	14.9%	5.4%	7.8%	0.6%	1.5%	6.9%	0.0%
Middle East and North Africa	28.8%	25.0%	6.1%	17.0%	6.1%	7.9%	0.5%	1.7%	7.0%	0.0%
South Asia	28.5%	27.4%	8.4%	14.4%	4.9%	7.4%	0.4%	2.0%	6.8%	0.0%
South-East Asia	30.3%	25.5%	6.6%	14.9%	5.5%	7.8%	0.7%	1.7%	7.1%	0.0%
Sub-Saharan Africa	36.4%	22.6%	5.5%	14.5%	5.5%	6.1%	0.8%	1.7%	6.9%	0.0%

There do not appear to be major differences between users with different geographical interests in terms of how they found out about SciDev.Net

Question 7 – How long have you been using SciDev.Net?

	Number	% of respondents
Less than 2 months	203	9.2%
2 to 6 months	316	14.3%
6 to 12 months	406	18.3%
1 to 2 years	678	30.6%
More than 2 years	567	25.6%
No response	43	1.9%

Question 8 – How would you rate the SciDev.Net website?

	Number	% of respondents
Excellent	869	39.3%
Good	857	38.7%
Of mixed quality	138	6.2%
Poor	3	0.1%
No response	346	15.6%

Ratings by profession

	Excellent	Good	Of mixed quality	Poor	No response	% rating excellent or good
All	**39.3%**	**38.7%**	**6.2%**	**0.1%**	**15.6%**	**78.0%**
No response	2.3%	0.0%	0.0%	0.0%	97.7%	2.3%
Aid agency official	39.5%	31.6%	5.3%	2.6%	21.1%	71.1%
Consultant	43.1%	42.3%	4.9%	0.0%	9.8%	85.4%
Government official (non-aid agency)	42.9%	40.0%	4.3%	0.7%	12.1%	82.9%
Graduate student	33.0%	52.7%	4.4%	0.0%	9.9%	85.7%
Industrial manager	15.8%	57.9%	10.5%	0.0%	15.8%	73.7%
Journalist	33.6%	40.7%	7.9%	0.0%	17.9%	74.3%
Librarian	35.4%	37.5%	10.4%	0.0%	16.7%	72.9%
NGO official	41.0%	46.2%	4.3%	0.0%	8.5%	87.2%
Physician	37.7%	45.9%	4.9%	0.0%	11.5%	83.6%
Research administrator	50.0%	27.8%	5.6%	0.0%	16.7%	77.8%
Researcher (policy)	49.1%	39.1%	6.4%	0.0%	5.5%	88.2%
Researcher (science)	38.3%	41.3%	6.6%	0.2%	13.6%	79.6%
School student	33.3%	16.7%	25.0%	0.0%	25.0%	50.0%
School teacher	43.3%	36.7%	6.7%	0.0%	13.3%	80.0%
University student	33.0%	34.1%	6.8%	0.0%	26.1%	67.0%
University teacher	42.6%	35.0%	5.1%	0.0%	17.2%	77.6%
Science communicator	36.0%	37.8%	6.3%	0.0%	19.8%	73.9%
Other (please specify)	43.7%	37.2%	9.1%	0.0%	10.0%	81.0%

Five groups ranking SciDev.Net most positively (excellent + good ratings)

- Researcher (policy)
- NGO official
- Graduate student
- Consultant
- Physician

Five groups ranking SciDev.Net least positively (excellent + good ratings)

- School student
- University student
- Aid agency official
- Librarian
- Industrial manager

Ratings by country

	Excellent	Good	Of mixed quality	Poor	No response	% rating excellent or good
All	**39.3%**	**38.7%**	**6.2%**	**0.1%**	**15.6%**	**78.0%**
Developing country	40.4%	39.6%	6.1%	0.2%	13.8%	79.9%
Developed country	39.4%	39.4%	6.8%	0.0%	14.4%	78.8%
No response	2.3%	0.0%	0.0%	0.0%	97.7%	2.3%

There are no significant differences between developing and developed country users in terms of their ratings of the website.

Rating by age group

	Excellent	Good	Of mixed quality	Poor	No response	% rating excellent or good
All	**39.3%**	**38.7%**	**6.2%**	**0.1%**	**15.6%**	**78.0%**
under 25	34.5%	38.9%	7.1%	0.9%	18.6%	73.5%
26-35	34.4%	41.8%	7.0%	0.2%	16.6%	76.2%
36-50	38.4%	41.7%	6.5%	0.0%	13.3%	80.1%
51-65	46.5%	35.4%	5.8%	0.2%	12.0%	81.9%
65+	45.7%	34.0%	5.6%	0.0%	14.8%	79.6%
No answer	28.0%	28.8%	3.2%	0.0%	40.0%	56.8%

There is an interesting result here that ratings tend to increase with age until 65.

Ratings by length of use

	Excellent	Good	Of mixed quality	Poor	No response	% rating excellent or good
All	**39.3%**	**38.7%**	**6.2%**	**0.1%**	**15.6%**	**78.0%**
Less than 2 months	21.7%	44.3%	6.9%	0.5%	26.6%	66.0%
2 to 6 months	30.7%	44.6%	7.3%	0.0%	17.4%	75.3%
6 to 12 months	37.7%	41.1%	6.9%	0.2%	14.0%	78.8%
1 to 2 years	44.5%	38.3%	6.2%	0.0%	10.9%	82.9%
More than 2 years	48.0%	35.1%	5.5%	0.2%	11.3%	83.1%
No answer	2.3%	0.0%	0.0%	0.0%	97.7%	2.3%

It is notable that longer term users tend to give more positive ratings. Satisfaction with the website probably increases with familiarity.

Ratings by area of geographical interest

	Excellent	Good	Of mixed quality	Poor	No response	% rating excellent or good
All	**39.3%**	**38.7%**	**6.2%**	**0.1%**	**15.6%**	**78.0%**
China	40.2%	36.8%	8.0%	0.2%	14.8%	77.0%
Latin America and the Caribbean	41.5%	37.9%	7.5%	0.2%	12.9%	79.4%
Middle East and North	40.7%	36.7%	8.6%	0.0%	14.0%	77.4%
South Asia	42.5%	36.8%	7.0%	0.1%	13.6%	79.3%
South-East Asia	40.6%	37.7%	6.8%	0.1%	14.7%	78.3%
Sub-Saharan Africa	42.1%	37.8%	6.7%	0.1%	13.3%	79.9%

There do not appear to be any significant differences in the ratings of users with different geographical interests.

Question 9 – Main strengths of the website

This open ended question was answered by 83% of respondents.

The most commonly mentioned strengths of the website relate to its news function. In rough order of importance (descending) the following points were mentioned:

- The breadth and comprehensiveness of the website, as well as the diversity of content.
- The ability to get a quick overview of current science and development issues.
- The timeliness, topicality and relevance of articles, which often engage with frontier issues.

- The quality of journalism. Reports were generally seen as being objective, balanced and accurate, and the writing style was often praised for being clear, concise, and punchy using plain English and explaining science in simple terms
- The user-friendliness and easy navigation of the website.
- The global coverage of stories covering all developing countries
- The use of materials from scientific journals (*Science* and *Nature*) and links to other sources.
- The usefulness of weekly emails and RSS feeds.

While news was the main emphasis of these comments, a few respondents identified non-news features as strengths of the website, including announcements, dossiers and opinions.

Question 10 – Main weaknesses of the website

This open ended question was answered by 79% of respondents. Of those who responded nearly 40% stated that there were no problems with the website. Thus only half of the questionnaire respondents mentioned any weaknesses of the website.

Most of the comments related to website design, functionality and presentation issues. There were relatively few comments on the contents of the website, but some of the more frequently mentioned points included:

- Many users commented that news articles are too brief.
- Some respondents suggested that number of stories presented creates a sense of information overload.
- Many users were critical of an excessive focus on a few single issues, such as bird flu.
- A few respondents mentioned that they thought that the content of the website was biased towards developed countries.
- Several respondents commented on the balance of articles between Asia, Africa and Latin America. Responses were somewhat contradictory in this respect.
- Most of the material is only available in English language.

In relationship to website design and functionality the main criticisms were:

- Cluttered page layout contributing to a sense of information overload. Some pages are overly long.
- Small font size leading to a cramped appearance
- Difficult navigation
- Broken links
- Slow downloads
- Unappealing graphic design – rather old fashioned look, not enough graphics, lack of colour.
- Lack of interactivity. Absence of comments facilities, discussion groups, electronic fora etc.
- Weak search facility
- Archived articles hard to find
- Limited material to download as pdf files
- Absence of video content

Question 11 – Which sections do you consult regularly?

	Number	% of respondents
News	1538	69.5%
Features	964	43.6%
Opinions	642	29.0%
Editorials	660	29.8%
Dossiers and quick guides	618	27.9%
Regional gateways	292	13.2%
E-guide to science communication	424	19.2%
Notices of jobs, events, etc.	624	28.2%
Book reviews	293	13.2%
Letters to the editor	166	7.5%
Links	394	17.8%
I do not consult any of these sections regularly	81	3.7%
No response	346	15.6%

Multiple selections allowed

The importance of SciDev.Net as a news service is highlighted by these results. Features and editorials are also commonly read. It is notable that only 28% of users regularly consult dossiers and quick guides. Regional gateways are also not commonly used. A significant number of respondents make regular use of notices of jobs, grants and events.

Question 11 - *Disaggregated by profession*

	News	Features	Opinions	Editorials	dossiers and quick guides	Regional gateways	E-guide to S&C	Notices	Book reviews	Letters to the editor	Links	I do not consult any of these sections regularly	No response
All	69.5%	43.6%	29.0%	29.8%	27.9%	13.2%	19.2%	28.2%	13.2%	7.5%	17.8%	3.7%	15.6%
No response	2.3%	2.3%	0.0%	0.0%	0.0%	2.3%	0.0%	2.3%	0.0%	0.0%	2.3%	0.0%	97.7%
Aid agency official	63.2%	42.1%	23.7%	*15.8%*	31.6%	13.2%	*13.2%*	*7.9%*	10.5%	5.3%	13.2%	2.6%	21.1%
Consultant	**80.5%**	39.8%	26.0%	29.3%	25.2%	**20.3%**	16.3%	26.8%	16.3%	6.5%	18.7%	4.1%	9.8%
Government official (non-aid agency)	69.3%	42.1%	30.0%	32.1%	29.3%	16.4%	20.7%	27.9%	10.7%	5.7%	*12.9%*	7.1%	12.1%
Graduate student	63.7%	36.3%	36.3%	30.8%	*22.0%*	12.1%	18.7%	**44.0%**	14.3%	**14.3%**	**24.2%**	4.4%	9.9%
Industrial manager	73.7%	*21.1%*	26.3%	*5.3%*	31.6%	10.5%	21.1%	21.1%	**26.3%**	5.3%	10.5%	**10.5%**	15.8%
Journalist	77.1%	**57.1%**	22.1%	28.6%	25.7%	13.6%	17.9%	25.7%	10.0%	7.1%	11.4%	2.1%	17.9%
Librarian	*58.3%*	41.7%	27.1%	25.0%	29.2%	16.7%	**25.0%**	22.9%	**20.8%**	4.2%	20.8%	6.3%	16.7%
NGO official	71.8%	46.2%	31.6%	29.9%	29.9%	11.1%	23.1%	27.4%	18.8%	6.0%	17.1%	4.3%	9.4%
Physician	*60.7%*	*27.9%*	24.6%	37.7%	26.2%	3.3%	24.6%	34.4%	11.5%	6.6%	**29.5%**	**9.8%**	11.5%
Research administrator	75.9%	**63.0%**	37.0%	**42.6%**	24.1%	13.0%	18.5%	25.9%	9.3%	**11.1%**	13.0%	1.9%	16.7%
Researcher (policy)	**79.1%**	50.9%	36.4%	**39.1%**	**40.0%**	21.8%	*12.7%*	32.7%	**20.0%**	5.5%	16.4%	2.7%	5.5%
Researcher (science)	71.4%	44.4%	32.9%	30.0%	27.7%	13.4%	17.4%	**35.7%**	12.0%	10.6%	22.1%	2.3%	13.6%
School student	66.7%	*33.3%*	25.0%	**50.0%**	0.0%	8.3%	16.7%	25.0%	**25.0%**	0.0%	**25.0%**	0.0%	25.0%
School teacher	73.3%	**53.3%**	23.3%	*16.7%*	*16.7%*	*6.7%*	10.0%	20.0%	*3.3%*	10.0%	**30.0%**	0.0%	13.3%
University student	*52.3%*	*31.8%*	25.0%	*14.8%*	28.4%	12.5%	*9.1%*	28.4%	13.6%	4.5%	8.0%	3.4%	26.1%
University teacher	66.8%	39.9%	28.1%	29.9%	28.1%	10.6%	20.2%	27.5%	17.5%	7.6%	19.3%	3.3%	17.2%
Science communicator	72.1%	45.0%	29.7%	29.7%	26.1%	12.6%	**36.0%**	24.3%	*2.7%*	7.2%	13.5%	0.9%	18.9%
Other (please specify)	77.5%	52.8%	29.0%	36.4%	34.6%	13.9%	22.5%	21.6%	12.1%	6.1%	18.2%	5.6%	10.0%

Some notable findings from this table include:

- Consultants and policy researchers tend to be more interested in new stories than other types of users.
- Journalists, research administrators and school teachers tend to be more interested in new stories than other types of users.
- Policy researchers appear to be particularly interested in dossiers and quick guides in comparison to other groups
- The E-guide to science and communication is particularly read by science communicators and librarians, but not, as might be expected, by journalists.
- Notices are particularly commonly consulted by graduate students and science researchers

Disaggregated by country

	News	Features	Opinions	Editorials	dossiers and quick guides	Regional gateways	E-guide to S&C	Notices	Book reviews	Letters to the editor	Links	I do not consult any of these sections regularly	No response
All	69.5%	43.6%	29.0%	29.8%	27.9%	13.2%	19.2%	28.2%	13.2%	7.5%	17.8%	3.7%	15.6%
Developing country	70.0%	43.2%	29.7%	30.3%	29.4%	14.6%	**23.4%**	**35.7%**	16.2%	8.6%	21.1%	3.0%	13.8%
Developed country	72.2%	46.3%	29.5%	30.5%	27.0%	11.4%	*13.2%*	*17.3%*	9.1%	6.1%	13.2%	5.0%	14.4%
No response	2.3%	2.3%	0.0%	0.0%	0.0%	2.3%	0.0%	2.3%	0.0%	0.0%	2.3%	0.0%	97.7%

There are few significant differences between developed and developing country users in terms of the different sections of the website that they consult. Developing country users appear to be more interested in notices and the E-guide to science and communication than developed country users.

Disaggregated by area of geographical interest

	News	Features	Opinions	Editorials	dossiers and quick guides	Regional gateways	E-guide to S&C	Notices	Book reviews	Letters to the editor	Links	I do not consult any of these sections regularly	No response
All	69.5%	43.6%	29.0%	29.8%	27.9%	13.2%	19.2%	28.2%	13.2%	7.5%	17.8%	3.7%	15.6%
China	74.5%	50.4%	33.4%	36.0%	27.5%	14.4%	17.0%	20.6%	13.8%	9.7%	15.5%	4.9%	14.8%
Latin America and the Caribbean	74.9%	45.1%	29.9%	33.5%	29.5%	14.5%	16.5%	26.2%	14.1%	7.8%	17.6%	4.7%	12.9%
Middle East and North Africa	75.9%	47.4%	33.9%	36.5%	31.6%	14.2%	21.3%	28.3%	15.4%	8.9%	20.1%	4.0%	13.8%
South Asia	73.6%	51.5%	34.4%	34.8%	31.3%	13.9%	19.9%	26.9%	13.9%	9.3%	17.3%	3.6%	13.8%
South-East Asia	72.8%	50.5%	33.3%	34.8%	32.4%	12.5%	19.2%	25.4%	13.7%	9.0%	17.8%	4.0%	14.9%
Sub-Saharan Africa	71.9%	48.0%	30.8%	30.2%	28.8%	12.0%	18.6%	33.8%	12.9%	7.7%	19.5%	4.0%	13.2%

Question 12 – What additional topics should we cover in the news section?

It is notable that fewer than half of the respondents (47%) answered this open-ended question, which may indicate a high level of satisfaction with the breadth of news content. However, a number of topics were consistently identified by respondents as requiring additional news coverage:

- Energy, in particular small scale energy and renewable energy
- Plant sciences
- Science policy
- Climate change
- Earth sciences
- Nanotechnology
- Stories covering applications of technology

Question 13 – What do you think of the relative focus on international/regional and country-specific news on the website?

	Number	% of respondents
The website should focus more on international and regional news	301	13.6%
The website should give more space to country-specific news	259	11.7%
The balance is about right	1033	46.7%
No opinion/ no response	619	28.0%

A clear majority stated that the regional balance of news was about right or had no strong opinion on this issue.

Question 14 – What additional types of content should we add to the dossiers?

Only a third of respondents answered this open ended question. The most frequent proposals that were put forward for additional content to the dossiers included:

- More links to external sources and documents, and more comprehensive bibliographies
- More country level information and case studies
- More examples on the application of technology
- More interactive features including discussion groups
- Directories of researchers and media contacts
- Briefings on the key arguments of academic debates
- More downloadable content including research papers
- Greater use of images and movies
- More information on donor and government policies
- Foreign language versions
- Interviews with important scientists
- Calendars of key events

There were also numerous suggestions for additional subjects that could be covered by new dossiers, including:

- Science policy
- The commercialisation of science
- Renewable energy
- Water and sanitation
- Information Technology
- Conventional and modern plant breeding
- Public Private Partnerships in research
- Biosafety

Question 15 - Do you use the 'What's New' section regularly?

	Number	% of respondents
Yes	936	42.4%
No	530	24.0%
Never noticed it	400	18.1%
No response	345	15.6%

Question 16 – Which notices, if any, do you consult regularly?

	Number	% of respondents
Announcements	917	41.4%
Events	1029	46.5%
Jobs	530	23.9%
Grants	758	34.3%
None	394	17.8%
No response	346	15.6%

Multiple selections allowed

Disaggregated by profession

	Announcements	Events	Jobs	Grants	None	No response
All	41.4%	46.5%	23.9%	34.3%	17.8%	15.6%
No response	0.0%	2.3%	2.3%	2.3%	0.0%	97.7%
Aid agency official	*31.6%*	*28.9%*	*13.2%*	*5.3%*	**34.2%**	21.1%
Consultant	**46.3%**	41.5%	26.0%	*26.0%*	19.5%	9.8%
Government official (non-aid agency)	40.7%	43.6%	21.4%	*24.3%*	**25.7%**	12.1%
Graduate student	39.6%	**53.8%**	**50.5%**	**53.8%**	15.4%	9.9%
Industrial manager	**47.4%**	42.1%	*15.8%*	*21.1%*	15.8%	15.8%
Journalist	*35.0%*	47.1%	21.4%	*23.6%*	20.7%	17.9%
Librarian	*22.9%*	47.9%	*12.5%*	*20.8%*	**25.0%**	16.7%
NGO official	44.4%	48.7%	20.5%	35.0%	**27.4%**	9.4%
Physician	37.7%	**57.4%**	**29.5%**	**39.3%**	13.1%	11.5%
Research administrator	**48.1%**	38.9%	*14.8%*	**44.4%**	16.7%	16.7%
Researcher (policy)	42.7%	**54.5%**	26.4%	37.3%	20.9%	5.5%
Researcher (science)	46.2%	**53.1%**	**28.4%**	**47.7%**	*10.6%*	13.6%
School student	41.7%	50.0%	*0.0%*	*16.7%*	8.3%	25.0%
School teacher	**50.0%**	*36.7%*	*6.7%*	*13.3%*	16.7%	13.3%
University student	*34.1%*	46.6%	23.9%	*22.7%*	14.8%	26.1%
University teacher	**48.9%**	47.1%	23.0%	**45.0%**	*11.5%*	17.2%
Science communicator	*34.2%*	43.2%	27.9%	*18.9%*	21.6%	18.9%
Other (please specify)	39.4%	42.4%	20.3%	27.7%	28.1%	10.0%

There are some marked differences between professions, most of which are not surprising given different funding and career stage needs.

Disaggregated by country

	Announcements	Events	Jobs	Grants	None	No response
All	41.4%	46.5%	23.9%	34.3%	17.8%	15.6%
Developing country	**48.4%**	**55.5%**	**28.3%**	**45.7%**	*9.8%*	13.7%
Developed country	*32.2%*	*34.1%*	*18.1%*	*17.3%*	**31.8%**	14.5%
No response	0.0%	2.3%	2.3%	2.3%	0.0%	97.7%

Developing country users appear to be more interested in all types of announcements than developed country users.

Disaggregated by area of geographical interest

	Announcements	Events	Jobs	Grants	None	No response
All	41.4%	46.5%	23.9%	34.3%	17.8%	15.6%
China	37.9%	42.2%	18.5%	24.3%	26.9%	14.7%
Latin America and the Caribbean	38.7%	46.3%	21.3%	29.1%	22.7%	12.9%
Middle East and North Africa	41.7%	47.1%	26.1%	31.4%	22.9%	13.7%
South Asia	41.9%	45.3%	22.8%	29.5%	22.1%	13.8%
South-East Asia	40.6%	44.5%	21.6%	31.1%	22.3%	14.9%
Sub-Saharan Africa	43.4%	47.8%	27.7%	36.3%	20.8%	13.1%

Question 17 – Should our notices be divided by region?

	Number	% of respondents
Yes	865	39.1%
No	495	22.4%
No opinion	468	21.2%
No response	384	17.4%

Question 18 – In what ways do you find the SciDev.Net website useful?

	Number	% of respondents
It keeps me up-to-date with relevant news	1519	68.6%
It provides valuable comment and insight	874	39.5%
It brings my attention to important issues	1210	54.7%
It provides valuable background information on key issues	1042	47.1%
It is a good source of relevant reports and contacts	910	41.1%
It helps me inform the decision-making of others	362	16.4%
Other (please specify)	103	4.7%
No response	457	20.7%

Multiple selections allowed

This table again highlights the importance of SciDev.Net as a news service and source of background information. Only a small percentage of users (16.4%) stated that it helped to inform the decision making of others.

Question 19 – What was the most useful or interesting news item that you read on SciDev.Net over the past year?

The response rate to this question was rather low (48%) and few respondents were able to identify a single news item that had been most useful or interesting to them. Most of the responses referred to broad topics. The most commonly mentioned included bird flu, climate change, malaria, biotechnology, tsunami reports, drug development and nanotechnology.

Question 20 – Are you actively involved in developing policy in topics covered by the SciDev.Net website, in engaging in policy-related discussions about these topics or in researching policy-related issues?

	Number	% of respondents
Yes	602	27.2%
No	1022	46.2%
No response	589	26.6%

A clear finding from the respondents to this question is that only a minority of users (27.2%) are involved developing policy on topics covered by SciDev.Net. The following table shows the professions of respondents who fit into this category.

Question 20 - *Respondents who answered yes disaggregated by profession*

	Number	respondents answering yes to q 20 as % of each professional group
All	602	27.2%
No response	0	0.0%
Aid agency official	15	**39.5%**
Consultant	53	**43.1%**
Government official (non-aid agency)	53	**37.9%**
Graduate student	13	*14.3%*
Industrial manager	4	21.1%
Journalist	12	*8.6%*
Librarian	10	*20.8%*
NGO official	46	**39.3%**
Physician	13	21.3%
Research administrator	26	**48.1%**
Researcher (policy)	67	**60.9%**
Researcher (science)	87	*20.4%*
School student	4	33.3%
School teacher	3	*10.0%*
University student	14	*15.9%*
University teacher	87	26.3%
Science communicator	25	*22.5%*
Other (please specify)	70	30.3%

The table indicates that the professions most commonly claiming to be involved in policymaking include aid agency officials, consultants, government officials, NGO officials, research administrators and policy researchers.

Respondents who answered yes disaggregated by country

	Number	respondents answering yes to q 20 as % of each group
All	602	27.2%
Developing countries	325	24.2%
Developed countries	277	33.6%
No answer	0	0

This table indicates that developed country users appear to have slightly more influence on policy making

Respondents who answered yes disaggregated by region of interest

	Number	respondents answering yes to q 20 as % of each group
All	602	27.2%
China	207	32.0%
Latin America and the Caribbean	296	31.1%
Middle East and North Africa	195	30.3%
South Asia	245	30.6%
South-East Asia	256	30.2%
Sub-Saharan Africa	342	30.4%

There is little difference between regions of geographical interest

Question 21 – How has our material been of value to you in policy making?

A quarter of respondents answered this open-ended question, which corresponds to percentage of respondents who stated that they are actively involved in developing policy in question 20. The responses to question 21 provide further insight into the level and type of policy influence exercised by users of SciDev.Net. The majority of respondents who answered question 21 were only loosely connected to policy making, and included for example science communicators NGO lobbyists and researchers who judged their outputs to be relevant to the policy debate. About 20% of the respondents to question 21 (equivalent to about 5% of the user base of SciDev.Net) held positions where they are able to influence policy directly. Amongst this small group the main policy roles that were evident from the questionnaire responses included science funding, setting research priorities for research institutes, and contributing to the policy making within governments, donor and international organisations on science topics.

Responses to question 21 suggest that SciDev.Net influences policy mainly by providing background information and general knowledge of science and development rather than specialist material on specific policy issues. Some of the uses of SciDev.Net in informing policy makers noted by respondents include (in rough order of importance):

- Providing background information on topics and keeping policymakers up to date with new ideas
- Providing a source of opinion and comment on science debates
- A source of information for the writing of briefing papers and lobbying materials

- A source of information for inclusion in newsletters and online documentation for broader dissemination amongst policy makers.
- Providing examples of policy measures in individual countries, which may be applicable elsewhere
- Providing information relevant to the setting of research priorities
- Informing policy makers on cross-cutting topics (e.g. climate change, bioethics etc.) that are relevant, but may not be central, to their primary responsibility
- Providing practical examples on the application of technology and evidence about what works. Several users suggested that SciDev.Net could provide more such examples.

Question 22 – Another example of how SciDev.Net has assisted you?

Around 40% of respondents answered this open-ended question. The services provided by SciDev.Net that were most frequently cited include:

- Background information on a wide range of science and development topics
- A teaching resource
- A source of information that is useful for writing research proposals and articles
- Job announcements
- Grant announcements
- Conference announcements
- Keeping colleagues informed about science news
- Links to other publications
- Guidance on good practice in science journalism
- Newsfeeds and syndication
- Book reviews as a source of information for library purchases

Question 23 - What impact has the material you have read on SciDev.Net had on your ideas and/or activities?

	Number	% of respondents
It has increased my awareness of the importance of science and technology	861	38.9%
It has helped me to increase the awareness of others of the importance of science and technology	695	31.4%
It has helped me to make up my mind on critical issues	640	28.9%
It has had a direct impact on personal decisions that I have made	223	10.1%
It has had a direct impact on professional decisions that I have made	409	18.5%
It has allowed me to expand my professional knowledge and skills	1151	52.0%
It has allowed me to contact others who share my personal or professional interests	424	19.2%
It has helped me to engage in activities that I was previously unaware of	381	17.2%
None	51	2.3%
Other (please specify)	77	3.5%
No response	458	20.7%

Multiple selections allowed

Question 23 - *Disaggregated by Profession*

	It has increased my awareness of the importance of science and technology	It has helped me to increase the awareness of others of the importance of science and technology	It has helped me to make up my mind on critical issues	It has had a direct impact on personal decisions that I have made	It has had a direct impact on professional decisions that I have made	It has allowed me to expand my professional knowledge and skills	It has allowed me to contact others who share my personal or professional interests	It has helped me to engage in activities that I was previously unaware of	None	Other (please specify)	No response
All	38.9%	31.4%	28.9%	10.1%	18.5%	52.0%	19.2%	17.2%	2.3%	3.5%	20.7%
No response	2.3%	2.3%	0.0%	0.0%	0.0%	2.3%	2.3%	0.0%	0.0%	0.0%	97.7%
Aid agency official	34.2%	31.6%	34.2%	7.9%	34.2%	44.7%	21.1%	13.2%	0.0%	0.0%	28.9%
Consultant	33.3%	30.9%	28.5%	9.8%	19.5%	58.5%	20.3%	8.9%	4.9%	4.1%	12.2%
Government official (non-aid agency)	45.0%	38.6%	32.1%	9.3%	25.0%	51.4%	15.0%	14.3%	1.4%	3.6%	20.0%
Graduate student	45.1%	28.6%	31.9%	14.3%	12.1%	50.5%	16.5%	26.4%	6.6%	2.2%	15.4%
Industrial manager	47.4%	26.3%	26.3%	15.8%	15.8%	42.1%	10.5%	15.8%	0.0%	0.0%	15.8%
Journalist	39.3%	35.7%	25.7%	7.1%	20.0%	52.1%	17.9%	20.0%	2.1%	5.0%	22.1%
Librarian	50.0%	43.8%	25.0%	6.3%	12.5%	39.6%	20.8%	16.7%	6.3%	2.1%	18.8%
NGO official	37.6%	30.8%	30.8%	10.3%	21.4%	53.8%	20.5%	17.9%	1.7%	5.1%	19.7%
Physician	34.4%	27.9%	21.3%	13.1%	19.7%	50.8%	6.6%	19.7%	1.6%	1.6%	14.8%
Research administrator	29.6%	38.9%	24.1%	7.4%	25.9%	57.4%	24.1%	27.8%	1.9%	1.9%	20.4%
Researcher (policy)	30.9%	23.6%	35.5%	6.4%	13.6%	68.2%	16.4%	23.6%	1.8%	8.2%	7.3%
Researcher (science)	42.5%	27.2%	31.2%	10.8%	18.1%	53.5%	20.2%	20.0%	1.9%	1.9%	19.5%
School student	41.7%	16.7%	8.3%	16.7%	8.3%	25.0%	0.0%	0.0%	0.0%	8.3%	41.7%
School teacher	30.0%	40.0%	20.0%	10.0%	10.0%	60.0%	23.3%	10.0%	0.0%	0.0%	16.7%
University student	46.6%	27.3%	31.8%	14.8%	14.8%	44.3%	20.5%	17.0%	1.1%	0.0%	29.5%
University teacher	38.7%	34.4%	27.8%	10.3%	20.8%	52.6%	24.8%	16.6%	2.7%	3.6%	23.0%
Science communicator	31.5%	35.1%	23.4%	8.1%	16.2%	52.3%	16.2%	12.6%	0.9%	2.7%	25.2%
Other (please specify)	43.3%	35.1%	33.8%	12.1%	18.2%	53.2%	20.3%	15.6%	2.6%	6.9%	13.4%

Disaggregated by country

	It has increased my awareness of the importance of science and technology	It has helped me to increase the awareness of others of the importance of science and technology	It has helped me to make up my mind on critical issues	It has had a direct impact on personal decisions that I have made	It has had a direct impact on professional decisions that I have made	It has allowed me to expand my professional knowledge and skills	It has allowed me to contact others who share my personal or professional interests	It has helped me to engage in activities that I was previously unaware of	None	Other (please specify)	No response
All	38.9%	31.4%	28.9%	10.1%	18.5%	52.0%	19.2%	17.2%	2.3%	3.5%	20.7%
Developing country	**45.9%**	34.1%	**32.6%**	**12.9%**	21.9%	53.5%	**22.9%**	**22.1%**	1.6%	2.0%	19.9%
Developed country	*29.5%*	28.6%	*24.4%*	*6.1%*	*13.9%*	52.2%	*13.9%*	*10.2%*	3.5%	6.1%	18.1%
No response	2.3%	2.3%	0.0%	0.0%	0.0%	2.3%	2.3%	0.0%	0.0%	0.0%	97.7%

It is notable that developing country users report that SciDev.Net has had a greater impact on their work than developed country users

Disaggregated by area of geographical interest

	It has increased my awareness of the importance of science and technology	It has helped me to increase the awareness of others of the importance of science and technology	It has helped me to make up my mind on critical issues	It has had a direct impact on personal decisions that I have made	It has had a direct impact on professional decisions that I have made	It has allowed me to expand my professional knowledge and skills	It has allowed me to contact others who share my personal or professional interests	It has helped me to engage in activities that I was previously unaware of	None	Other (please specify)	No response
All	38.9%	31.4%	28.9%	10.1%	18.5%	52.0%	19.2%	17.2%	2.3%	3.5%	20.7%
China	40.2%	35.9%	29.4%	11.3%	20.2%	53.6%	19.8%	17.0%	2.2%	3.9%	18.5%
Latin America and the Caribbean	34.8%	32.5%	28.9%	7.5%	16.3%	53.7%	15.8%	13.7%	2.4%	4.3%	17.4%
Middle East and North Africa	41.4%	36.4%	29.7%	11.2%	20.1%	56.1%	18.5%	18.4%	2.2%	4.5%	18.0%
South Asia	42.1%	36.1%	32.1%	10.1%	19.9%	56.3%	20.3%	17.8%	1.4%	4.3%	18.3%
South-East Asia	40.8%	34.0%	30.7%	11.0%	20.3%	57.2%	19.9%	17.6%	2.2%	3.2%	18.6%
Sub-Saharan Africa	40.8%	33.6%	30.6%	12.3%	21.5%	55.7%	20.3%	19.2%	2.1%	4.7%	18.5%

Question 24 – What use have you made of information in the dossiers?

	Number	% of respondents
I have used dossier material in my research	570	25.8%
I have used dossiers to help write an article or report	612	27.7%
I have used dossiers for teaching	395	17.8%
I have used dossiers for a student project	174	7.9%
I have used information as input into a policy decision	291	13.1%
I have not used information from dossiers	487	22.0%
Other (please specify)	118	5.3%
No response	458	20.7%

Multiple selections allowed

There is some inconsistency between the responses to question 24 and responses to question 11 which suggested that only 28% of respondents regularly use the dossiers. The responses to question 24 may often be indicative of occasional rather than regular use.

Question 25 – If you have used information from the dossiers, which of the following elements have you used?

	Number	% of respondents
Policy briefs	555	25.1%
Opinion articles	674	30.5%
Key documents	667	30.1%
Glossary	140	6.3%
Links	383	17.3%
Spotlights	165	7.5%
No response	1038	46.9%

Multiple selections allowed

The low response rate to this question suggests that many users may not be aware or fully understand the nature of the different elements of the dossiers.

Question 26 – Other specific online sources

More than half of the respondents (1103) answered this question. The responses were very diverse and exhibited a long-tail distribution. In other words there were relatively few online sources that were mentioned by a large number of users, and a large number of specialist sites that were each mentioned by only a few users. The most common responses were identified using keyword analysis and are reported in the table below. This indicates that the most frequent alternative sources of science news that SciDev.Net users refer to are the BBC, *Science*, *Nature*, *The New Scientist*, *The New York Times* and *Scientific American.*

Source	Number of responses
BBC	253
Science	125
Nature	119
New Scientist	48
Google	46
New York Times	41
CNN	27
Scientific American	26
WHO	22
FAO	20
The Economist	19
Development Gateway	16
Yahoo	15
Pubmed	13
Washington Post	13
Eurekalert	12
AAAS	12
Medscape	11
Science Direct	11
ELDIS	10
World Bank	10
Google Scholar	9
The Guardian	9
The Scientist	9
CGIAR	8
NASA	8
IFPRI	7
IUCN	7
The Lancet	7
Reuters	6
Science news	6
Research Research	3

Question 27 – What do these other sources offer that is currently not available through SciDev.Net?

This open ended question was answered by just over 60% of respondents. A large number of respondents stated that SciDev.Net is complementary to other sources of science news that have a different focus or serve different audiences. There was little sense that SciDev.Net is duplicating the work of other sources, or that SciDev.Net compares unfavourably with other sources. Respondents noted many reasons why they would consult other websites in addition to SciDev.Net. The most common include:

- Many respondents also require more detailed information on their areas of scientific specialism, and would typically look to other sources to provide this

- Many respondents are looking for material that is specific to a particular country or region, and also consult other websites for this.
- In contrast to those looking for more specialist information, a number of respondents were looking for scientific news with a broader focus or news that is explained in more simple terms than SciDev.Net.
- Many respondents suggested that other sources contained more comprehensive information on job vacancies.
- Many respondents indicated that they consulted other sources to gain access to published papers in downloadable form.
- A number of respondents suggested that other sources had a livelier format and contained more interactive features, such as discussion groups and blogs.
- A few respondents suggested that other news sites were quicker to report breaking news.
- A small number of respondents reported that they consulted other sites to get information in languages other than English.

Question 28 - Would you like to see more or fewer images on the website?

	Number	% of respondents
More images	522	23.6%
Balance is about right	689	31.1%
Fewer images	119	5.4%
No opinion	231	10.4%
No response	651	29.4%

Question 29 - Do you feel that the balance of coverage leans too heavily on the life sciences, on the physical sciences and technology, or is about right?

	Number	% of respondents
Too much life sciences	252	11.4%
Too much physical science and technology	94	4.2%
The balance is about right	994	44.9%
No opinion	221	10.0%
No response	651	29.4%

Question 30 - If you are registered with SciDev.Net, you will occasionally receive material from us about new items relevant to your topic or topics of interest. Do you feel

	Number	% of respondents
That you would like to receive more of this information from us	407	18.4%
That the amount of information you receive is about right	896	40.5%
That you receive too much information from us	49	2.2%
No opinion	92	4.2%
No response	668	30.2%

Question 31 - Would you like to receive a monthly email alert listing new material relevant to your geographical region(s) of interest, in addition to the standard weekly email alert?

	Number	% of respondents
Yes	1136	51.3%
No	359	16.2%
No opinion	85	3.8%
No response	632	28.6%

Question 32 - Would you like to receive occasional emails containing information about products or services relevant to the goals and interests of SciDev.Net that are provided by third parties?

	Number	% of respondents
Yes	652	29.5%
No	739	33.4%
No opinion	173	7.8%
No response	648	29.3%

Question 33 - Do you think our editorial independence would be significantly affected if we introduced paid advertising to help cover our operating costs, provided that a clear distinction is made between editorial and advertising content?

	Number	% of respondents
Yes	591	26.7%
No	698	31.5%
No opinion	268	12.1%
No response	655	29.6%

Question 34 - Would you like to see SciDev.Net make greater use of blogs (web-based diaries)?

	Number	% of respondents
Yes	526	23.8%
No	450	20.3%
No opinion	576	26.0%
No response	660	29.8%

Question 35 - What additional features would you like to see on the website that would make it easier for users to express their views?

This open ended question was only answered by 23% of respondents. Of the respondents who answered the question around 30% stated that there was no need for additional features to allow greater user participation. While this may suggest that demand for more interactive features on the website is limited, it should also be noted that response rates for questions appearing at the end of the questionnaire, in particular the open-ended questions, tended to be low.

The most common suggestions for more interactive features were (in rough order of importance):

- Discussion groups on selected topics
- Reader comments should be posted below each article
- Message board, Guest book, visitors pages and chat rooms
- More frequent letters to the editor
- Blogs, written in particular by developing country scientists (while many users were enthusiastic about the blogs others questioned their value)
- Ability to submit own articles and publications to SciDev.Net
- Polls and surveys
- Podcasts

Question 36 - Would you make use of a short online training course on science journalism?

	Number	% of respondents
Yes	979	44.2%
No	570	25.7%
No response	663	30.0%

Question 37 - Would you make use of a short online training course on how to interact with science journalists and other science communicators?

	Number	% of respondents
Yes	1027	46.4%
No	503	22.7%
No response	682	30.8%

Question 38 - Would you be interested in attending events organised by SciDev.Net on contentious issues at the interface between science, technology and public policy?

	Number	% of respondents
Yes	1188	53.7%
No	218	9.9%
No opinion	193	8.7%
No response	613	27.7%

Question 39 - Would you like to be put in contact with others in your country or region that share an interest in science and technology communication?

	Number	% of respondents
Yes	1135	51.3%
No	441	19.9%
No response	636	28.7%

Question 40 - If you are a scientist or a policy researcher, would you be prepared to talk to your country or region about a news event or a related issue?

	Number	% of respondents
Yes	965	43.6%
No	356	16.1%
No response	891	40.3%

Question 41 – Additional comments

Around a quarter of respondents provided additional comments. Nearly all of these were positive statements praising the work of SciDev.Net in general terms.

Annex 6. Report of Telephone Interviews

Gareth Williams, The Policy Practice

1. Purpose

Thirty telephone interviews each lasting about 20 minutes were held with users of SciDev.Net. The purpose was to complement the online questionnaire through more open-ended and in-depth discussion of selected issues that were of particular interest to the evaluation. The interviews were loosely structured around the following questions:

- How interviewees use the website, and what impact it has had on their work.
- How users perceive the quality of the website and its journalism.
- What users consider to be the strengths and weaknesses of the website in terms of its content and functionality. The dossiers were a particular focus of discussion.
- How users suggest that the website should be developed in future.
- What comments users have on the outreach and marketing of the website

This report summarises the principal findings of the interviews, and is organised according to the above list of questions. It must be emphasised at the outset that the statements report the opinions of individual users, and may not necessarily reflect the conclusions of the evaluation.

2. Sample

The sample was devised so as to ensure good coverage of users from developing countries (and Sub-Saharan Africa in particular). The regional breakdown of the sample was as follows:

- Developed countries (10)
- Developing countries (20), of which:
    - Sub-Saharan Africa (11)
    - Latin America and Caribbean (5)
    - Asia (4)

A particular focus of the interviews was to assess the impact of SciDev.Net on policy making. The sample was designed to include a high proportion of users, who are actively engaged in policy making and policy research. More than half of the sample (18 interviewees) had a strong connection to policy and were drawn from government and international organisations, research institutes, think tanks, universities and NGOs, government departments and international organisations. The remainder of the interviews were conducted with postgraduate students, university lecturers, scientific researchers, journalists, science communicators and research administrators. Three interviews were conducted in French (West Africa).

The sample was broadly representative of the SciDev.Net user base as reflected in the database of registered users. However, certain categories were

somewhat overrepresented, including developing country users and users with policy influence because the evaluators were particularly interested in the use of the website in developing countries and its influence on policy.
Potential interviewees were chosen at random from the list of registered users, and were sent an invitation to participate by email. The response rate was about 10%. From those who responded, interviewees were selected through purposive sampling so as to achieve the desired balance between different categories of users.

3. Use and impact of the website

The telephone interviews confirmed the results of the online questionnaire that users are primarily interested in SciDev.Net as a source of news and comment. Many users return to the site regularly, typically once a week. Almost all users reported that their primary route to the website is through links in the weekly email, and they rarely visited SciDev.Net without the email prompt.

The weekly email appears to have a strong influence on which sections of the website are regularly consulted by users. Articles that are highlighted in the weekly email (mainly news stories, editorials and opinion pieces) receive most visits. As discussed in section 6, the majority of users do not regularly consult the dossiers. Some users suggested that this was because of the limited prominence of dossiers in the weekly email.

An important finding of the interviews is that the use and impact of SciDev.Net extends much beyond the registered user base. Numerous interviewees reported that they forward the weekly email or particular stories widely amongst colleagues.[78] Many organisations reported that their organisations draw on materials from the SciDev.Net website in their own media and publications. Interviewees were requested to comment on their use of other online and printed sources of information on science and development. All responded that they were not aware of another website or journal that covers the same breadth of science news as SciDev.Net and was focused on developing countries. However, most users also consult a large number of other websites and journals that cover narrower and more specialist topics.

The interviews revealed that the website is used in a number of ways for different purposes, and that its impacts vary accordingly. In rough order of importance these can be grouped as follows:

- ***Providing background knowledge on science and development***

  The majority of interviewees explained that their primary reason for consulting the website was to keep in touch with a broad range of science and development issues mainly for background knowledge or general interest. It is notable that many users reported that the website only partially met their needs as a source of information on their primary research or policy interest, and for this purpose they

[78] In the World Bank for example the weekly email is circulated to around 500 staff members including around 100 at senior level.

would typically make greater use of more specialist websites and journals. SciDev.Net appears to be most valued by users as a means to brief themselves on topics about which they are less knowledgeable, but need to gain a rapid understanding. Users would typically consult SciDev.Net if embarking a new research subject or to find out about a topic that was connected to their primary interest, including cross-cutting issues such as HIV/AIDS or climate change.[79] Many users stated that they use the website to get a quick sense of the debate surrounding particular topics. Editorials are seen as being particularly useful in this regard.

- ***A convenient means to access latest sources on science and development***

  Many interviewees praised the convenience of the website as a means to keep up to date with science and development news. Several stated that most of the information posted on SciDev.Net was available elsewhere, but SciDev.Net brought it all together and provided a useful time saving tool. This was particularly valued as an aid to preparing conference and workshop presentations. The links to more detailed original sources are highly valued by users, in particular where SciDev.Net provides access to scientific journal articles free of charge.

- ***Announcements of jobs, grants and events***

  In addition to providing a news service, many users, particularly those from developing countries, stated that the website provides an important source of information on grants, jobs and events. One interviewee is currently undertaking a fellowship that was advertised on the website. Others mentioned that colleagues in their institute had applied for grants or attended conferences as a result of notices posted on SciDev.Net. A few respondents stated that their organisations actively use SciDev.Net as a means to advertise events, jobs and research outputs.

- ***A research tool***

  Several respondents reported that they use SciDev.Net as a means to assess what organisations and countries are already doing in particular fields of scientific research. Many developing country users reported that they find the website helpful as a tool to follow scientific developments in other developing countries, and to consider possible applications in their own country

- ***A teaching resource***

  Several university lecturers reported that they use material on the website as a teaching resource. There is also a large student user base, particularly amongst postgraduate students.

- ***Raising awareness of science and development through other media***

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[79] For example a trade policy researcher reported that the site was useful as a quick source of information on scientific topics that are relevant to trade, including IPRs and GMOs . Another user mentioned that she used the website to get up to speed on new topics, for example the drafting of a research proposal on biological control of malaria carrying mosquitoes.

Several users commented that SciDev.Net serves an important awareness raising and educational purpose. Its messages reach a wide audience where other media actively use content from the website. The telephone interviews revealed several examples of this, including a radio station in Burundi that broadcasts information about HIV/AIDS drawn from SciDev.Net, a webmaster in South Africa who uses SciDev.Net RSS feeds to add content to several science websites, a science magazine in India whose journalists consult SciDev.Net daily as a source of material, and a science organisation in North America that uses SciDev.Net material for a newsletter of science and human rights.

- ***Informing policy making***

  It is difficult to demonstrate the influence of SciDev.Net on policy making because links between knowledge and policy are complex, multiple and difficult to trace. The telephone interviews revealed a limited number of examples where users reported that information gained from SciDev.Net had been directly applied to policy making. These include the design of an African Science and Innovation Facility,[80] the formulation of Kenya's recent environment policy and the drafting of a climate change strategy for a nature conservation body in southern Africa. However, these cases are relatively few in number, and it is difficult to demonstrate a clear impact of SciDev.Net in shaping policy. However, the interviews suggested that many people with important policy responsibilities are exposed to SciDev.Net either as registered users or recipients of forwarded information. Several interviewees suggested that the website provided background information that was an essential basis for effective policy making. One stated that the website provide a minimum platform of knowledge that policy makers needed to be aware of. This is particularly important in the case of topics covered by SciDev.Net that cut across many areas of policy making in science and beyond (e.g. climate change, HIV/AIDS).

- ***Health information***

  Some of the reported uses of the website were rather unexpected. For example, many individuals, companies and organisations commented that they used the website as a source of information on health risks.[81]

4. User opinions on the quality of journalism and the website

All of the interviewees held a positive view of the quality of the journalism and the website. The survey revealed a broad consensus that SciDev.Net provides a source of reliable, balanced, interesting, accessible and current news with a sharp focus on science in developing countries. Several users stated that they perceived SciDev.Net as a credible source of information that could be trusted and had no particular agenda of its own. No instances of major inaccuracies in

[80] Consultants working on the design of this facility are reportedly heavy users of SciDev.Net. SciDev.Net has also invited comments on the design on the proposal (See news item posted on 14 August 2006)

[81] A mining company in India reported that information on malaria and bird flu obtained from SciDev.Net had been passed on as general health advice to their workforce. A student in West Africa reported that he had used information from SciDev.Net to inform himself and his friends about HIV/AIDS.

reporting were mentioned during the interviews. One interviewee commented that in some cases SciDev.Net needed to make it clearer who the authors of stories were.

Some interviewees were asked to comment on the quality of SciDev.Net in relation to other sources of information on science and development that they regularly use. The feedback was positive, and nearly all users considered that the service provided by SciDev.Net was at least as good as or better than other sources of science news.

The interviewees held varying opinions on whether the news items covered by SciDev.Net provided sufficient length and depth. Many users found the length of articles to be about right, a significant number suggested that material is rather brief, introductory and short on substance. One interviewee suggested that readers with specialist knowledge of a particular subject would not learn much from the website. Another described SciDev.Net as a news clipping service rather than a source of original or investigative journalism. A few users stated that they believed that SciDev.Net relies too heavily on other sources, but others commented that they had noticed that stories are increasingly written by SciDev.Net's own network of journalists.

Several interviewees commented that they particularly valued the editorials and opinion pieces which provide more in depth discussion and debate, and are an essential complement to the brief and factual news pieces.

The large majority of users commented favourably on the design, usability and functionality of the website, which was generally considered to be simple to navigate, fast to download, and attractive in appearance. However, several interviewees commented that the website was rather traditional in appearance and pages were somewhat overloaded in textual content and lacking in graphics. Several users commented that the search function is not very effective and precise, and is not prominently displayed on the homepage. Many complained that it was particularly difficult to find archived articles.

5. User opinions on the content and coverage of SciDev.Net

The telephone interviews indicated that users are generally satisfied with the content and coverage of SciDev.Net. While many users requested more material on their own particular subject specialism and country or regional interest, it is difficult to cater for all needs, and most found that the balance of coverage is generally appropriate for the purpose and audience served by SciDev.Net. However, interviewees did point to a number of areas of imbalance and weakness in the coverage of SciDev.Net. The observations below summarise the points that were raised most consistently:

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    - Several interviewees commented that SciDev.Net tends to focus on hot topics of the moment to the detriment of other subjects. For example, one user commented that the coverage of GMOs in relation to advances in conventional plant breeding was excessive given the relative

importance of the two techniques in food production. Numerous interviewees suggested that there had been overkill in the coverage of avian flu.

- Several interviewees claimed that certain topics are not given sufficient attention. The most commonly mentioned was energy, in particular small-scale and renewable energy. Others included earth sciences (e.g. natural disasters), plant diseases, food and nutrition and food science.
- A number of users suggested that SciDev.Net tended to focus too much on hard science without giving enough attention to the application of technology in developing countries. Several called for the website to provide more news stories describing practical examples of the use and adoption of science and technology, including community level applications. Similarly others suggested that SciDev.Net could give greater coverage to applied research and technology transfer.
- A number of users commented that SciDev.Net provided insufficient coverage of science policy issues, in particular country-by-country reports on science policy and analysis of best practice.
- Some users commented that there was relatively little discussion on the website of the general contribution of science to development and the role of innovation systems in economic growth. This was viewed as essential to making a persuasive argument about the links between science and development.
- Several users remarked that the website did not cover social science issues. While accepting that this might be beyond the remit and resources of SciDev.Net, it was argued that it was essential to discuss the socio-economic barriers to the uptake of science and technology in developing countries.
- Numerous interviewees commented that there were many research institutes in their countries whose programmes and outputs were not reported by SciDev.Net. In focusing on internationally newsworthy stories, it was suggested that SciDev.Net might be missing an opportunity to report on less well known, but valuable pieces of research being undertaken in developing countries.
- While the announcements of grants, jobs and events were appreciated by many users, there was a widespread view that this service was somewhat limited and some important events were missed. Many users reported that they trawled numerous websites for information on grants, jobs and events, and that no website provided a comprehensive source.
- The majority of interviewees praised the website for its coverage of developing countries. However, a number of respondents commented that developed country writers and viewpoints appeared to be better represented in the editorials and opinion pieces.
- The three interviews conducted with French speaking users indicated that language barriers are a significant obstacle to the use of the site in francophone countries. There was a call for more content to be made available in French. In addition, users stated that news coverage of

countries in Francophone Africa was far more limited than in Anglophone African countries.[82]

6. User opinions of the dossiers

Interviewees were questioned about their use and opinions of the dossiers published on SciDev.Net. The main finding was that the majority SciDev.Net users make little use of the dossiers. Around half of the interviewees stated that they had never consulted the dossiers, and only about a quarter reported that they regularly used the dossiers. One of the reasons for the limited use of the dossiers may be that the majority of users access the website through the weekly email that tends to highlight news items, editorials and announcements. Presentational issues may also be important. Some interviewees commented that the dossiers were not given sufficient prominence on the home page, and suggested that the term "dossier" might not be the right label to attract users (a term like "hot topics" or "in depth" might work better).

The interviewees who did make regular use of the dossiers held rather mixed views on their quality. Several users stated that the dossiers were one of the main strengths of the website and were generally well produced. Many interviewees found the dossiers to provide a useful synthesis and convenient source of information on new topics. However, it was generally considered that the dossiers were rather introductory, and while this served an important purpose and would be of use to a general audience, specialists would not learn much. Some respondents stated that they found the dossiers most useful to inform themselves about issues on the edge of their professional responsibilities. A few interviewees stated that the dossiers added little value to the website, and that in many cases they provided only a brief overview linked to content that appears elsewhere on the website. It was also suggested that there was a lack of consistency in the format and level of detail of different dossiers. However, several interviewees stated that they had noticed improvements in the quality, coverage and consistency of the dossiers over the past few years.

A few suggestions were put forward on possible improvements to dossiers. One stated that it was difficult to know when material in dossiers had been updated and users who had registered an interest in each dossier should be sent email alerts when new material is added. Another interviewee suggested that dossiers could be enhanced by adding country case studies and practical examples of the use of science and technology in developing countries. A proposal was put forward that dossiers could be replaced by six monthly news roundups on the latest developments for certain topics.

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[82] It is likely that other non-English speaking audiences would make similar comments to the sample of Francophone users. However, the limited sample and languages available to the interviewer makes this difficult to judge.

7. Suggestions for the future development of SciDev.Net

The interviews generated numerous suggestions on the future development of SciDev.Net. Reflecting the diversity of users and their varying needs, these suggestions covered a wide range of ideas. There was little sense of a common view amongst users on how the website should be developed in future. The main points put forward in relation to the content and functionality of the website are summarised below:

7.1. Content

Many of the suggestions for the further development of SciDev.Net relate to subjects referred to in section 5 that interviewees identified as gaps and imbalances in the content of the website. There were several demands for additional coverage of energy issues (in particular small scale energy and renewable energy), food and nutrition, the practical applications of technology in developing countries and science policy issues.

Several users suggested that SciDev.Net could provide more comprehensive coverage of research policies, programmes and outputs from individual developing countries or regions. There was a suggestion that this could be provided as a regional roundup produced for each region on a six monthly basis.

A few users suggested that the focus of SciDev's future development should be to extend the content of dossiers and to add new dossiers. However, other users questioned the value added of dossiers in their present form. One interviewee suggested that a more useful approach would be to draft updates on research progress, news and events for particular subjects on a regular (possibly six monthly) basis.

Several interviewees suggested that SciDev.Net should focus its resources on investing in strengthening its journalistic capacity in developing countries. One commented that the SciDev.Net should broaden its sources, carry out more original journalism and rely less on material reproduced from other science journals. Another suggested that SciDev.Net should provide more lengthy, in-depth and investigative stories.

Reflecting the popularity of the announcements section of the website, several interviewees suggested that SciDev.Net should extend its coverage of jobs, grants and events. It was noted that there was a strong demand for such information amongst the science community in developing countries. One interviewee suggested that SciDev.Net should upgrade and extend its information on grants by providing a grant finder monthly service.

Many users appreciated the access provided by SciDev.Net to other websites and journals, in particular the free access provided to many scientific papers. Several interviewees proposed that SciDev.Net should strengthen its knowledge management function and its role as a portal to other information providers on science and development. It was suggested that SciDev.Net

should attempt to negotiate greater access to free journal articles for developing country users, or could attempt to purchase wholesale access to online journals on behalf of its users. One interviewee suggested that there was an important and unmet demand for an authoritative source of statistics on science and development that could be provided by SciDev.Net.

Another frequent suggestion was for SciDev.Net to develop its role as an education tool. Some interviewees proposed that SciDev.Net could develop a student section, or provide simplified science news for schoolchildren in developing countries. Many considered SciDev.Net could play a greater role in popularising science in the developing world and encouraging more students to enter a scientific career.

As noted in section 5 the interviews with French speaking users suggest that there is significant demand for more non-English language content.

7.2. Functionality

In discussing the functionality of the website many users commented on the limited interactivity of the website. It was noted that SciDev.Net operates much like an online newspaper rather than an interactive website that invites user input. Many users stated that this format is well suited to their needs. However, about half of the participants in the telephone interviews considered that SciDev.Net should do more to use the technology of the internet to provide more interactive features. Some of the suggestions put forward included:

- Online discussion groups, electronic conference or e-fora organised around particular topics.
- Blog spots for science journalists
- Feedback on SciDev.Net articles. Several users pointed out that while the website allows users to comment on articles, few of these comments appear on the website. One interviewee also questioned why there are so few published letters to the editor.
- An online directory of individuals and organisations interested in particular research topics that would facilitate research collaboration. One interviewee suggested that this might take the form of a market place for research ideas putting researchers in touch with other.
- More opportunities for users to submit their articles and announcements. Several interviewees stated that they would be interested in posting news stories on SciDev.Net to publicise their research outputs.

It was notable, however, that a sizeable minority of interviewees expressed a sceptical view of the usefulness of interactive features. Many stated that they would not have the time to participate in discussion groups. It was also noted that it is often difficult to achieve balanced and high quality participation in discussion groups.

In addition to comments about greater interactivity, there were many other suggestions on how the functionality of the website could be improved. These included:

- RSS feeds, while generally working well, should be subdivided by topic as well as by region

- Search and archive functions need to be improved and made more prominent
- CD Rom versions could be distributed in countries with poor internet connectivity
- Email alerts should be issued to interested users when dossier are updated or extended
- Regional gateways could be further subdivided. For example, several users in Southern Africa stated that it would be useful to highlight Southern Africa related news rather than to have to browse through all of the content relating to Sub-Saharan Africa.

8. Outreach and marketing

There was a widespread view amongst interviewees that SciDev.Net could more actively market itself and increase its user base. Some users commented that the website is not widely advertised or linked to other sites. Many reported that few of their colleagues used the website.

A few interviewees were able to the comment on the potential audience of the website. One stated that there were around 250,000 scientific researchers in Latin America, of which around 20% are interested in policy. On the basis of the number of registered users of SciDev.Net in Latin America, this may represent about 10% of the potential audience in Latin America.

Various suggestions were put forward on how SciDev.Net might increase its readership:

- New or enhanced services would attract more users to the site. For example, more comprehensive coverage of events, jobs and grants would bring in users who would then be more likely to views news content and dossiers.
- Linking to mailing lists held by other organisations. The telephone interviews revealed that the SciDev.Net weekly email is already widely circulated beyond the registered users. Several interviewees commented that their organisations also operated large mailing lists that could be used to advertise SciDev.Net.[83]
- Commissioning more articles by high profile scientists would attract new users to visit the site.
- Targeting potential user groups that may have been missed. It was pointed out that the website could be more actively marketed amongst key government policy makers. One interviewee noted that SciDev.Net appeals mainly to a scientific audience and is not well known on the economics side of the development profession. Industrial associations were also mentioned as an audience that could be further developed.
- Maintaining free access. Many interviewees commented that maintaining free access was key to the future growth of the website (one

[83] These suggestions were put forward by a large UK student campaigning body and the webmaster for several NEPAD mailing lists on science and development.

user suggested that certain specialised reports could be sold for a fee). Several argued that placing advertising on the website would be off-putting to many users.

Annex 7. Report of Indian Focus Group

Report On the Focus Groups Held On 22ND July 2006 At Punjab Bhavan, New Delhi India

By Amitabha Pande

August 27th 2006

Executive Summary

(a). **What the participants like and do not like about the services offered by SciDev.**

What the participants like:

- The accent on the socio-economic dimensions of Science & Technology applications.
- Breadth of coverage, esp. on issues of greater relevance to developing economies.
- Functions as a single window on a wide range of issues.
- Useful, first level of information and competent presentation.
- Pleasant, relatively clutter free design and user friendly format.
- Content well written, easy to understand and jargon free.
- Balanced, geographical spread of information content.
- the dossiers were the most useful, in comparison with other elements such as News, however, the dossiers were not useful to policy makers in their present form, as they were not given sufficient depth.

What the participants do not like:

- Grossly inadequate publicity. Most potential users unaware of the existence of the site.
- Diffused focus on account of insufficient understanding of the **differentiated** requirements of users/potential users.
- Inadequacies in the depth of information content and its low levels of 'spatial resolution' - the need is for more detail at a country and sub-country level.
- Usefulness for policy makers/analysts and subject matter specialists limited.
- No indication of validation/quality control processes followed and how and why the content should be treated as authoritative and reliable.

(b). **What impact the participants believe the web site has had on those that use it.**

- Enabled users to make up for information gaps on subjects outside their own fields of specialization.
- Has enabled those with a science education to gain better appreciation of socio-economic and political dimensions of science and those with non-science education to get a bird's eye view of relevant and topical scientific and technological issues.

(c) **The ways in which the services of SciDev might be improved in future:**

- Greater attention to deepening of content in selected subjects instead of widening the range.
- Providing easy access through links to original sources/research material and cited authorities.
- Provide a forum for debates on key topical issues with presentation of multiple and contrary points of views. E.g. impact of aerosols versus carbon emissions on climate change.
- Provide Blog (s) for making the site more interactive, participative and for encouraging open ended debates.
- Add suitable links within the existing ones (e.g. country links in the regional gateways) especially to institutional structures and relevant organizations within the countries, the existing policies followed by them and analyses of such policies (including case studies)
- Provide links to technology data bases and relevant materials on technology options and choices especially technologies for livelihoods and micro-enterprises.
- Develop “brand equity” for the content esp. the dossiers by indicating who the authors/contributors are and what their standing in the field is.
- Step-up publicity and promotion.

(d). **any other key or unexpected findings:**

- A strong case was argued by many participants for strengthening the role of the Regional Coordinator, especially in commissioning content production at the regional/country level and for facilitating greater uploading of information from the developing countries. It was also suggested that the Regional Co-coordinator or a Regional Advisory Group could also play a bigger role in the choice of thematic/subject area priorities of specific relevance to the region.

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1. Background:

1.1 The Policy Practice had requested Amitabha Pande, a senior officer of the Government of India, who had formerly been at key policy making levels in the Ministry of Science & Technology to coordinate a Focus Group discussion in India as a part of the evaluation exercise. Prior consultations and informal discussions were held with the Regional Coordinator of SciDev – Ms T.V. Padma – to decide on the final list of the invitees. The intent was to secure greater participation of potential users at various levels of policy making/policy analysis than of existing users from other categories. A list of forty invitees was drawn up and a detailed letter of invitation sent, explaining the purpose of the meetings, along with a brief on SciDev. A short questionnaire was also sent in advance to enable participants to prepare themselves. Some key officials at the senior most decision making levels were personally contacted to ensure their participation.

1.2 The meeting was held in Punjab Bhawan, New Delhi on 22nd July. It lasted six hours. Seventeen participants attended, in addition to the focus Group Moderator and the SciDev Regional Coordinator. As a fair amount of preparation had preceded the meeting the preliminaries were kept to the barest minimum to gain more time for meaningful discussion. The discussions went beyond the set of questions posed by the organizers to reflect on some of philosophical issues implicit in the 'mission' objectives of SciDev.

1.3 As the number of potential users was larger than regular users among the participants, it was decided to continue discussions in a plenary format. The discussions were lively and animated with equal degree of participation of all the participants.

2. Characteristics of the Participants

2.1 There were seventeen (17) participants out of the forty (40) invited. There were ten (10) potential users and seven (7) users. The following is the category-wise composition of the participants:

		Users	Non-Users
(1)	Aid Agency Official	1	0
(2)	Consultant	0	2
(3)	Government officials	0	6
(4)	Journalists	3	0
(5)	Researcher / University Teacher	1	0
(6)	Science Communicator	1	1
(7)	NGO Official	1	1
	Total	**7**	**10**

2.2. All Government participants were at senior policy making levels including one who ranked second only to the Secretary, Science & Technology. One of the participants had recently retired as one of the highest ranking Science & Technology administrators in India with a record of having pioneered some of the most significant technology interventions for socio-economic development.

2.3 Annex-I provides the list of the participants, their occupations and their mailing addresses.

3. Overall Impressions of SciDev

3.1 The Group felt that apart from a discussion on the website itself, it may be useful to reflect on some of the philosophical and ideological assumptions implicit in the stated objectives of SciDev, to enable the participants to develop a better critique. The following issues were explored in discussion:-

- The notion of what constitutes “science” and the risk of perpetuating a positivist, exclusivist and western approach to science.

- The notions of ‘development’ ‘developing countries’ and ‘developed countries’ and the dangers of scientific and technological determinism in supporting western style, wasteful, energy intensive and consumerist patterns of development.

- The assumption that superior levels of scientific knowledge production takes place primarily in the developed world which needs to be communicated to and disseminated in the developing world for consumption by passive users there. S&T capacity development can thus be confused with ready acceptance and consumption and digesting of knowledge produced outside of the user and his environment.

3.2 It was felt that initiatives such as SciDev, emanating from the developed world, could easily fall into any of the above traps unless conscious efforts were made to:

- Widen the definition of ‘science’ (the dossier on Traditional Knowledge systems for example, was an effort in the right direction) by giving an equal emphasis to social and human sciences.

- Collect inputs from people’s movements especially social movements related to issues in science, environment, habitat, natural resources, water, natural calamities, etc. and make these inputs a part of the knowledge base available to users.

- Decentralize content production such that groups in the developing countries became partners in ‘uploading’ of content as much as in ‘downloading’. Such content would, of course, be

subject to rigorous validation and quality control processes. Quality Control over decentralized content production could be achieved regionally. An independent panel of external referees would be easily available and The Regional Coordinator could arrange for such peer review locally.

- Make the SciDev network an active forum for dialogue and debate especially through Blogs and other interactive means.

3.3 Many of the overall impressions have also been captured in the executive summary and are not being repeated. However, the following unanimous observations / reactions deserve to be highlighted:

- Awareness regarding the site, particularly among policy makers is non-existent.

- While the website offers useful first level of information, being primarily a journalistic output, its usefulness for policy analysis or policy formulation is very limited.

- Although the quality of the content is good and the presentation user-friendly, the insufficient depth and the low spatial resolution of information limits its usefulness for potential users among policy analysts. Information should be as detailed as is technologically possible and should go down to as micro a level as required - country, province, district, sub-district, village cluster, village.[84]

- The website is particularly weak on information relating to technology.

[84] For instance, for a policy analyst in South Asia there is no point talking about the impact of Climate Change at a global level unless one can provide information/knowledge about impacts at regional or sub regional levels.

- For science journalists the SciDev website often serves as competition rather than as a resource because it provides fully developed stories and features rather than ideas and leads.

- The processes by which the website organizers and managers validated the information content and exercised quality control were not apparent and hence the user could never be certain whether the site was picking up the best of peer reviewed scientific content.

3.4 The reactions highlighted in the preceding paragraph were common to both users and potential users. Some of the users, especially, the journalists reported that their visits to the site were not very frequent as the topicality and the relevance of scientific developments for their specific readership/audience was so episodic and context driven that a general purpose site such as SciDev could not be expected to adequately service their requirements.

3.5 The potential users especially policy analysts felt that the site would be useful to cover information gaps primarily in areas outside their own respective spheres of specialization and much less so in their own spheres. Both users and potential users felt that a substantial deepening of content was called for. They also felt that the website could take on a knowledge management role by guiding and leading people to knowledge bases on the web.

4. The most useful parts of the SciDev. Website and its impact

4.1 Both policy analysts and science journalists agreed that ‘dossiers’ were the most useful parts especially for getting competent and well written background information on subjects outside their own spheres of specialization. But the usefulness of dossiers for policy analysts in their own areas of focus could be realized **only** if the reports were substantially more exhaustive and in-depth and if links and sub-links could lead to web libraries, digitized research

reports / documents and all allied knowledge resources available on the web through the SciDev window. The dossiers could then serve as centralized 'meta-data' through which users could access all the peer reviewed web based research material on the subject.

4.2 Both types of users also appreciated the 'opinion' articles and suggested that the SciDev site could serve as a platform for informed debate on specific topical themes presenting multiple, differing and opposite points of view. The theme (s) could change fortnightly and the debates archived. This could prove to be extremely useful.

5. The least useful parts of the Scidev website and why

5.1 No specific views were expressed on the least useful parts. As the site was felt to be generally useful in an 'all-round' sort of way, comparisons between the most useful and the least useful parts were not really possible. For science journalists, news-based features and stories were the least useful as SciDev in this role could be viewed as competition rather than as a source for developing new stories.

5.2 A view was expressed that presently the Regional Gateways did not appear to add much value as they only provided a region wise selection of the available content on the site rather than access to more detailed and region specific content.

6. Improvements that could be made to SciDev

6.1 Most of the suggestions have been covered in the Executive Summary. The following require reiteration in view of the complete unanimity of views among the participants:

- A substantial deepening of the content on chosen topics (especially the dossiers) both in terms more data especially updated statistical data and links to peer reviewed research output on the web.

- Addition of links and sub-links especially links to countries, their policies, their institutions and organizations and analyses of their policies.

- Augmentation of content on technology, technology choices and links to technology data bases, technology scans.

- Addition of blogs and discussion groups to make the site much more interactive and lively.

- Increase opportunities of more uploading of content from regions by giving the Regional Coordinators / Regional Advisory Groups a greater role in commissioning content production.

- Establishing brand equity for the content by making transparent the validation, peer-reviewing, quality control processes and by providing details of authors / contributors and their standing in the field.

- A concerted effort to publicize and market the site through advertisements in widely circulated science magazines and supplements and web-sponsorship of major scientific conferences workshops, etc.

7. The value of the 'dossiers' and how they could bed improved

7.1 As already brought out, the dossiers were treated as the most useful element of the SciDev web-site by all user/potential user segments. The following suggestions were made to improve the 'dossier' section and increase its usefulness:

- Dossiers needed to be added on several other topics, e.g. – natural calamities and extreme events, public health, renewable energy etc.
- Dossiers needed to be self-contained, exhaustive and more intensive.

- Research documents forming a part of the dossiers needed to be associated with the names of their editors / authors to develop a 'brand identity'.[85]
- Bibliographic links needed to be improved.
- Better links to be provided to peer reviewed journals.

7.2 The policy briefs produced by institutions like the IPCC, International Institute of Sustainable Development, the U.N. Organizations and the World Bank should be the models. The existing policy briefs are not exhaustive enough for use by policy makers.

7.3 The dossiers could profitably address filling the knowledge gaps –

- Among scientists and Science & Technology administrators of the socio-economic, socio-cultural and socio-political dimensions of scientific issues and concerns
- Among generalist administrators and senior policy making levels in socio-economic and infrastructure development sectors of scientific dimensions of sector concerns and issues.

8. Other services provided by SciDev

8.1 As awareness about the existence of the SciDev Website itself was extremely limited, the question of knowing about other services provided did not arise.

[85] Articles/Reports/Documents etc are presently anonymous and as Scidev itself is unknown there is no value associated with the name. An article appearing in Science or Nature ,for example, has a strong brand equity carrying a guarantee of conformity to the highest standards of scientific writing. While it will take a long time to achieve such brand equity, it should be possible that if the SciDev authors have a standing in the field then carrying a Byline will spell a measure of quality. This would eventually help SciDev build a strong 'Brand Equity'.

9. SciDev as a Network

9.1 The presence of SciDev as a network and as a stimulator, catalyst of interaction, collaboration and sharing has yet to be felt even among the registered users. In fact, the Focus Group meeting was found to be the first useful interaction among the fraternity of those concerned with science and development related matters: Presently Scidev is largely a one way communication exercise with some undercurrents of “us” (the developing world) and “them” (the developed world). Unless a much bigger role is envisaged for knowledge production and interaction in the regions and the regional Co-coordinator empowered to establish ‘communities of practice’ the possibilities of SciDev emerging as an active and lively network are probably limited.

9.2 The creation of Blog (s) and Discussion groups around specific subjects within the website will certainly stimulate networking and the participants look forward to such a development.

Participants at the Indian Focus Group Discussion

New Delhi the 22nd July, 2006

Name	Occupation	User/Non-User	E-Mail
Ms. Sangeeta Baksi	Government Official	Non-User	sangeetab@tifac.org.in
Dr. S.M. Kulshrestha	Consultant	Non-User	Drsmk2002@yahoo.com
Mr. Mallikarjun	NGO Official	Non-User	
Mr. Shambhu Singh	Government Official	Non-User	shambhuin@gmail.com
Ratnabali Mitra	Science Communicator	User	Ratna_@rediffmail.com
Mr. G. Srinivasan	Government Official	Non-User	Srinidst@nic.in
Mr. Dhruv Raina	Researcher / University Teacher	User	D_raina@yahoo.com
Mr. Indraneel Ghose	Aid Agency Official	User	Indraneel.ghose@ec.europa.eu
Ms. Roshni Sengupta	NGO official	User	roshnis@teri.res.in
Ms. Kinkini Dasgupta Misra	Science communicator	Non-User	udgm@vigyanprasar.gov.in
V. Rao Anjagavi	Government Official	Non-User	Venktesh@nic.in
Dr. Akhilesh Gupta	Government Official	Non-User	Gakhilesh2002@yahoo.co.in
G.S. Mudur	Journalist	User	Not available
Nitin Sethi	Journalist	User	nitin@cscindia.org
P. Saroop	Government official	Non-User	psaroop@dbt.nic.in
Y.S. Rajan	Consultant	Non-User	y.s.rajan@ciionline.org
R. Ramachandran	Journalist	User	bazzi@vsnl.com

Annex 8. Report of South African Focus Group

REPORT ON THE WORKSHOPS HELD IN SOUTH AFRICA ON 4TH JULY 2006 AT THE DURBAN UNIVERSITY OF TECHNOLOGY

AND INTERVIEWS CONDUCTED TELEPHONICALLY FROM 8TH JULY – 23RD AUGUST 2006

MODERATOR: PROF. D. (GANSEN) PILLAY

EXECUTIVE SUMMARY

Based on the focus groups sampled, the penetration and uptake of SciDev as an information source by South Africans does not appear to be significant. This may be attributed to the following primary reasons:

(i) SciDev is relatively unknown to many of the target audience. This may be attributed to the low visibility of SciDev and a marketing and communications strategy that can be best described as "passive".

(ii) Those who use SciDev, use it minimally since their focus for information is more acutely defined by their vocations. For example, a medical scientist will use PubMed more frequently than SciDev.

Despite the aforementioned, those who have been newly introduced to SciDev as well as current users are, in general, impressed by the appearance and structure of the site and by the latitude and depth of topics covered and information provided. The impact of the site on current users has been minimal. It appeared that many of them looked at the alerts superficially and did not spend enough time to navigate through the various elements of the site. Based on the responses of new users, the impact on this group may be positive in the future.

It was surprising that many of the new users contacted were unaware of the existence of SciDev – despite their access to the internet and their frequent use of similar sites.

In summary, the potential impact of SciDev on South Africans can become significant. However, this would only be achieved through a creative, pro-active, and aggressive communications and marketing strategy that delivers SciDev to the user. This focus group workshop attests to this when one counts

the number of new users that have registered to SciDev after minimal intervention. Increasing the visibility and use of SciDev is very easy and simple. One simply has to follow the following three steps:

(i) Host interactive discussions/workshops with all stakeholder groups – academia, industry, government, NGOs, students, etc. within developing countries;
(ii) Register the participants at the workshop; and
(iii) Add the SciDev link to the existing websites of stakeholder institutions/organisations.

SECTION 1: BACKGROUND

The database of current SciDev users in South Africa was supplied by The Policy Practice in the UK. Since the workshop was held regionally, only current users and potential users from the KwaZulu Natal region of South Africa were invited.

A total of 39 current users of SciDev were contacted by e-mail regarding the hosting of the workshop. Eight of these e-mail addresses were invalid. Eleven (11) persons responded. Most of the responses were as a result of personal telephone calls to these users. Of these four were available to attend the workshop. The list summarizing this is attached as "Current Users of SciDev" (Annexure 1).

A total of 38 potential users of SciDev were contacted by e-mail regarding the hosting of the workshop. One of the e-mail addresses was invalid. Thirty one (31) persons responded after numerous telephone calls. Of these 16 were available to attend the workshop. The list summarizing this is attached as "Potential Users of SciDev" (Annexure 2).

A focus group workshop was held on 4th July 2006 from 08h30 to 14h30 at the Durban University of Technology, Durban, South Africa. Participants followed a programme which included an introduction and demonstration of the site, interactive open discussions and sub-group discussions (Annexure 3). Twenty participants (Annexure 4) comprising six researchers (from academia and research councils), four research administrators (associated with policy formulation), two government officials, two policy researchers, two journalists, one from industry, one university undergraduate student and one science school teacher participated. In addition, 13 persons comprising 3 current users (2 journalists and 1 researcher) and 10 potential users (comprising 2 researchers, 1 research administrator, 2 journalists, 3 policy researchers and 1 each from industry and government) were contacted telephonically. All participants who attended the workshop were requested to complete a questionnaire (Annexure 5). The same questionnaire was sent to the remaining current and potential users who were not available for the workshop. They were requested to fill in the questionnaire and to submit it electronically. The exercise was also followed up telephonically to ensure responses.

SECTION 2: CHARACTERISTICS OF THE PARTICIPANTS

Details of the participants who attended the workshop are attached (Annexure 4). Details of the participants who were contacted telephonically and submitted their questionnaires electronically are contained in Annexures 1 and 2 (persons indicated as "Not Available" to attend).

SECTION 3: OVERALL IMPRESSIONS OF SCIDEV

In general, current users were satisfied with the website. Potential users were impressed by the range of features and the depth of coverage. One of the users indicated that the website "ranks among the top website in terms of design and appearance". Both users and potential users felt that since SciDev was targeting developing countries, an effort should be made to present the site in regional or indigenous languages (e.g., IsiZulu/Xhosa in South Africa). This would contribute to greater access to the site by populations from developing countries whose first language may not be English. Two potential users felt that the elements and sub-set of elements could be presented in alphabetical order. Regional gateways and links were acknowledged as excellent and provided a window to issues affecting other developing countries.

Those participants who were not natural or physical scientists were of the strong view that the site should cater for social sciences with a strong emphasis on multidisciplinary research topics and the integration of the social sciences in terms of human and economic development.

Both current users and potential users were very aware of other websites that covered similar criteria. However, their user-friendliness and attractiveness varied. Media users identified other sites that linked social change to development, e.g., witness.org. "Science in Africa" was found to be similar but lacked the depth of information which SciDev provided. According to one user, "SciDev has the potential to be the best and most comprehensive website if it were better known". Some respondents were of the view that other sites had more directed, relevant, and comprehensive links. Many indicated that ScienceDirect is an excellent website for similar information and covers a wide range of topical issues. CabDirect was found to contain more depth of information but is not available free of charge. Many felt that the free access to journals should be provided to every publication of the journal and not selected articles only, e.g., *Nature*. In addition, free access should be provided to more international journals.

It was the consensual view of all participants that SciDev is not being communicated and marketed aggressively and that this should be addressed. Target populations are being denied access to an important resource through lack of knowledge of the existence of the SciDev website.

SECTION 4: MOST USEFUL PARTS OF THE SCIDEV WEBSITE AND ITS IMPACT

Most respondents were aware of all the elements contained on the SciDev website. Elements which were most useful varied among the respondents. However, there was consensus that the "News" and "Features" sections were important. "Dossiers" and "Links" were singled out as the most useful parts of the site by most respondents, especially government and policy researchers. The dossier provided an avenue to obtain in-depth, current information on a topic easily and readily.

In addition, the following was noted by respondents as being useful:

- "Announcements" assisted with planning for conferences, and attending of meetings and workshops;
- There was free access to scientific journals and selected articles. The high cost of subscription is often an impediment in accessing information for researchers and academics;
- "Regional gateways" provided a window into science in other developing countries;
- "Editorials" were helpful to researchers and academics in broadening their thinking and views.
- The "E-guide" to science communication was exciting;

Some respondents were of the view that the integration of the social sciences into the content could enhance the website. Sections on the cultural dimension of science/social change, issues of a social dimension affecting development, and research linked to economic development should be included. The terms "science" and "development" needed to be more clearly defined. The website should also include more "lower-level" science for users with non-specialized knowledge in science. Sections on basic scientific information should be considered to improve the teaching of science at schools.

Human health challenges, including AIDS, malaria, TB, access to clean water, sanitation, etc. facing developing countries should be vigorously debated with a focus on poverty eradication and a better life for all. On-line workshops with specific themes should be considered.

Current users indicated that SciDev provided them with an additional resource to information which impacted positively on their vocations in terms of making informed decisions, especially regarding policy. Respondents also felt that SciDev can have an impact on poverty reduction and sustainable development through **providing information on** agricultural sustainability, disease prevention, science for entrepreneurial development, health issues, setting up of small scale industries, indigenous medicine, and renewable energy.

SECTION 5: LEAST USEFUL PARTS OF THE SCIDEV WEBSITE

In general, most respondents found the website useful. Consensus was that any information that was pre-screened and then placed into the public domain must be credible. Some respondents found the "Extended Dossiers" to be less useful for their purposes while others disagreed. One respondent found the "Book Reviews" to be subjective and therefore, not useful. Two potential users indicated that the "Letters to the Editor" were not useful.

SECTION 6: IMPROVEMENTS THAT COULD BE MADE TO SCIDEV

Suggestions to improvements that could be made to SciDev were largely dictated by the vocation of the respondent. These included:

- Links to specialist research groups within universities;
- Information for secondary school students considering a career in science;
- More information on funding opportunities (links) for researchers; and
- Additional dossiers on "Research Management", "Research capacity Building", "Innovation and Entrepreneurship", "IP and Technology Transfer";

Respondents found the contents of the site appropriate for their purposes. Articles on scientific journalism have prompted thoughts on re-curriculation and additions to the academic teaching content. Other sources that respondents used included the printed media, books, on-line journals, CabDirect, PubMed, conference-alerts.com, etc.

Respondents were of the view that SciDev should be circumspect with regard to the links it provides. A problem with the internet is that many sites provide unreliable information. According to users, one of the strengths of SciDev is that the information is reliable and it would be a pity to compromise this through attempting greater coverage. Respondents also felt that similar services focusing exclusively on other areas, e.g., health was not necessary and could easily be incorporated into a dossier. Integration of information could benefit users.

SECTION 7: VALUE OF THE DOSSIERS AND HOW THEY CAN BE IMPROVED

The dossiers were found to be very useful to all current users. Potential users indicated that they regarded the dossiers as being an important facet of the SciDev website. All respondents had a very good idea of the intent and content of "dossiers".

Policy researchers and persons from government affirmed the usefulness of dossiers but indicated that they had not relied solely on the SciDev site since

additional information which was purpose-specific was made available to them to assist in policy analysis.

New users indicated that all elements of the dossier were potentially useful since they considered the contents of the dossier to be well researched, relevant and of excellent quality. A few respondents indicated that dossiers could in some instances be region specific. Most participants were of the view that the dossier in its current format should be retained. Additional dossiers should be introduced which take into account regional and national priorities and imperatives.

Some were aware of other "policy briefs" especially within government circles. Policy briefs from the World Health Organization, United Nations, UNAIDS, etc. were indicated.

SECTION 8: OTHER SERVICES PROVIDED BY SCIDEV

Many of the users were aware of the other services offered by SciDev. Potential users, who gleaned this information, prior to attending the workshop, indicated that the additional services provided by SciDev are helpful and its use should be maximized. Both groups were of the view that announcements of regional and international meetings, workshops, conferences, training programmes, advertising, etc. were useful additions to the site. One respondent felt that use of "flashes" on the site should be used to highlight latest announcements, funding opportunities, etc.

One respondent (current user) also challenged SciDev to investigate "How did PubMed become the "gold standard" for research references in science?". He/she felt that users of the site could benefit from this exercise.

Many felt that the impact of SciDev was low. This could be mainly attributed to the "limited readership/audience of SciDev". Respondents concurred that training workshops through knowledge and technology transfer was central to address advancements in developing countries. Examples included, training on research methodology, science journalism and basic interventions in demystifying science.

SECTION 9: SCIDEV AS A NETWORK

Many respondents were of the view that the interaction with SciDev was "one-way". However, they acknowledged that they had to take responsibility for this since they were unaware that "two-way communication" was possible. One way of circumventing this misconception in the future is to engage in workshops which outline the attributes of the site.

The majority of respondents who were current users concurred that communications with persons having similar interests was not pursued. They

were of the view that an expert database containing names of persons with an indication of their specialist fields could be useful.

Many respondents (current and potential users) were well connected, electronically, with other user groups within their professions, e.g., Crop Biotech, IAIA (International Association for Impact Assessment), AfricaBio, IWSA (Institute for Waste Management in South Africa), etc.

Research policy makers and policy makers from government indicated that the site was used to a limited extent to solicit information which could assist in policy formulation. These persons were accessing sites better known to their portfolios, e.g., sites on health issues, corporate governance, etc.

From the user group, there was limited use made of the "Regional Gateways". However, potential users indicated that they considered this as an important window to learning about developments in other countries.

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Participants at the SciDev Focus Group Workshop
4th July 2006

First Name	Last Name	E-mail	Profession/Organisation
Bala	Pillay	pillayb1@ukzn.ac.za	Researcher
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Nelson	Moodley	moodleyy@ukzn.ac.za	Research Administrator
Prem	Mohun	mohunp@ukzn.ac.za	Research Administrator
Vaneshree	Govender	Vanesh@dit.ac.za	Research Administrator
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Nkululeko	Mkhize	mkhizenkululeko@durban.gov.za	Government

Programme of the SciDev Focus Group Workshop

Durban University of Technology
4th July 2006

08h30 – 09h00: Registration of participants.
Tea, coffee and biscuits.

09h00 – 09h15: Welcome – Prof. D. Pillay (Moderator).
Outline of meeting objectives and agenda for the day.

09h15 – 09h30: Introduction of participants.

09h30 – 10h00: Presentation: ***"The SciDev website: background and current status"***.

Demonstration: ***"The SciDev website"***

10h00 – 10h30: Preliminary discussion to establish an understanding of the role and objectives of SciDev.

Interactive question and answer session.

10h30 – 10h45: Tea, coffee and hot snacks.

10h45 – 12h45: Participants will be divided into two sub-groups.
Each sub-group will explore a range of questions contained in their participant pack and will provide consolidated feedback for each sub-group at the end of the session.

12h45 – 13h15: Buffet lunch.

13h15 – 14h15: Interactive open discussion, collation of responses and consolidation of issues raised.

14h30: Closure and tea.

Annex 9. Report of Ugandan Focus Groups

Report On the Focus Groups Held On 12th July 2006 At Hotel Equatorial, and On 09th August At The Athina Club In Kampala Uganda

By Paul Nyende, Agnes Nayiga and Jackie Naggayi

NKOOLA INSTITUTIONAL ASSOCIATES LTD

Executive summary

Two half-day workshops to evaluate the Science Development Network (SciDev) service were held on 13th of July 2006 at the Equatorial Hotel and on 9th August at the Athina Club in Kampala, Uganda. Twenty- two (22) participants (12 registered users and 10 potential users) attended the workshops. Their evaluation of the SciDev services is presented in the following report.

The participants appreciated/ liked the following about SciDev services:

- The SciDev website is well structured, logical and provides a wide range of good in-depth information.
- Information provided is authoritative, original and up to date
- The dossier section provides an in depth analysis of information
- The search facility is helpful although its utility is determined by the explicitness of the query
- The site provides science journalists and communicators with 'rare to get' news and information
-

The participants did not like the following:

- SciDev focuses more on the latest news and discoveries and gives little information on older science and technology.
- The site provides little information for socio-scientists who are also key actors in development.
- The website is cluttered, right from the home page, making it difficult for a new user to find required information
- The information contained is often too academic for frontline development workers
- The search facility is not easy to find in its current placement.
- There are no clear guidelines for contributing articles to the website, hence users feel left out, and only at the receiving end
- The rigorous peer review process of papers and articles for posting on the site does not favour local contributions
- The information provided is too general and not applicable to local contexts

Users reported that the SciDev service has helped them to improve their knowledge and awareness of latest issues in science and development; obtain information quickly; prepare teaching aids, student notes and reference material; and is inspirational for scientific writing.

The content of SciDev.Net can be improved by adding information on Socio-economic research and development; health related issues like malaria with a more African perspective/focus so

that it is sufficiently relevant to African readers; ICT and development; International trade and generally more regional and national specific information.

The SciDev website can be further improved by:

- De cluttering the site
- Making the site more applicable to local contexts by including local content
- Advertising the website more widely by linking to websites such as www.naads.org, www.naro.org, www.fao.org, www.I-network.org which are commonly used by potential users; making brochures; news paper, radio and television adverts.
- Book marking and standard archiving so that users can access older articles
- Increasing interaction between regional and national SciDev users by introducing and facilitating networks, country chapters, chart forums and public discussion forums
- Placing the search facility to the top right hand side on of the home page
- Capacity building on the use of the website for potential users

The other issue that emerged during the discussions was most Users are unaware of SciDev's procedures for sourcing information/ people contributing information. Therefore their ability to contribute to SciDev is limited. Furthermore interaction and networking between local Users of SciDev is poor. As a solution the participants of the second workshop proposed the formation of a SciDev Uganda Chapter for which they proceeded to set up an interim committee.

1 Background

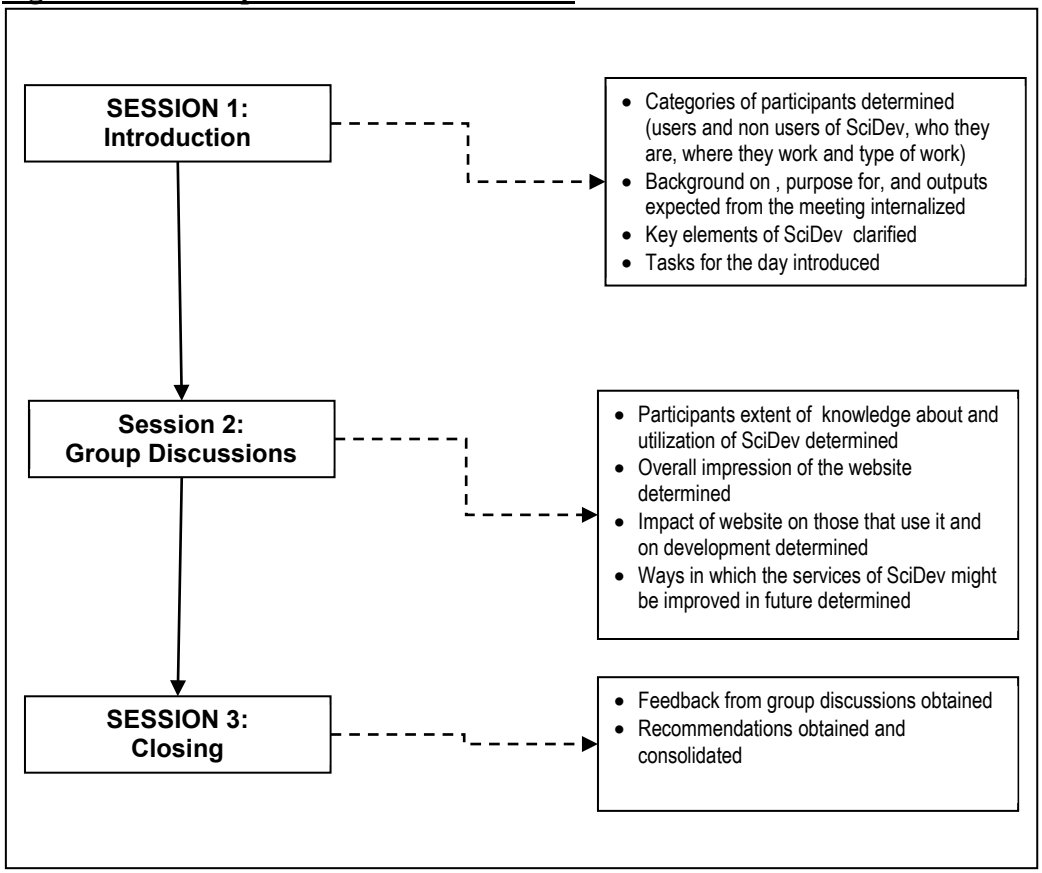
Two half-day workshops to evaluate the Science Development Network (SciDev) service were held on 13th of July 2006 at the Equatorial Hotel and on 9th August at the Athina Club in Kampala, Uganda. The first workshop was attended by twelve (12) participants and the second workshop by ten (10) participants. Both workshops were facilitated by two consultants from Nkoola Institutional Development Associates Ltd (NIDA).

The users of SciDev were selected from a list of registered users provided to NIDA by the client (Policy Practice). For the first workshop, a sample of fifteen individuals was selected randomly from the list as follows: three scientists, three science journalists, five government officials, one Aid agency, one NGO and others e.g. University lecturers and consultants and invited. A similar sample of potential users was identified and invited to the evaluation workshop. Using the same sampling frame for users, purposive sampling approach was used to select participants that were invited to the second workshop. Researchers and government officials were specifically targeted because their representation in the first workshop was poor. Two science journalists who are active users of SciDev were also selected purposively from the provided list of users. A similar category of potential users was also identified and invited to the second workshop.

1.1 Organisation of the Discussions

The discussions were organized in three sessions illustrated in figure 1.

Figure 1: Workshop Process and Deliverables



2 Characteristics of the Participants

The twelve (12) participants in the first workshop included six users and six potential users of the SciDev.net. Among the users, were two science journalists/ communicators; two working for NGOs (a medical scientist and one non scientist); and two government officials (a lecturer at Makerere University and Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) official). The potential users included two persons from NGOs, three communicators/ journalists and one person from a development agency. Among them one participant though not a registered User of the SciDev website, had used it a couple of times. He found the site through a Google search. All the other potential users had not visited the site prior to receiving invitations to the workshop.

The ten (10) participants who attended the second workshop included six users and four potential users of the SciDev.net. The users included one medical researcher who also runs a science media company; two science journalists/ communicators; two working for NGOs; one government official and one researcher. The potential users included two researchers from the National Agricultural Research organization (NARO) and add persons working with NGOs. All the potential users had not visited the site prior to receiving an invitation to the workshop. The detailed participant lists are attached as annex 1.

3 Overall Impressions of SciDev

There was a difference in the perceptions of users and potential users of the SciDev website. The Users based their evaluation on the site content while the potential users tended to base their on the "look and feel' of the website.

3.1 Users' Impressions on the website

The Users' impression of the website was that it:

- Is well structured and logical
- Is authoritative, rich in information
- Gives users access to a wide range of information
- Original in the information provided
- Provides in depth analysis in the information in the dossier section
- The search facility is helpful, but that its utility is usually determined by the explicitness of the query. The presence of the advanced search button helps to improve specificity of queries.
- The site enables science journalists and communicators to access 'rare to get' news and information for their reporting purposes.

The also had the following concerns:

- The site is crowded/ cluttered and information contained is often too academic for those that are not scientists/ researchers and academics.
- Too much emphasis is placed on latest news and discoveries and too little on older science and technology, which would be more relevant to practitioners in Africa.
- There is little content and information for socio-scientists who are key actors in development. Too few socio-scientists are aware of SciDev.
- There are no clear guidelines for contributing articles to the website, hence users feel left out, and are only at the receiving end
- The rigorous peer review process of papers and articles for posting on the site does not favour local contributions

3.2 Potential Users' Impressions on the website

The views of the potential users were that:

- The site is well structured and logical.
- Provides a wide range of good in-depth information
- The information is more suited to academics than development practitioners and is not adequately specific to local contexts.
- The website seems cluttered, right from the home page, which makes it difficult for a new user to find required information.
- Site is plain and not eye catching/ attractive enough (this was the view of only a few people). However there was no consensus on this as some felt site appearance was favourable for prolonged reading.
- The search facility was not easy to find in its current placement.

4 The most useful parts of the SciDev web site and its impact

Views on the most useful parts of the SciDev varied. The usefulness of the different elements to a user depends on the information that one requires and type of work they do. Both workshops were not able to adequately capture the views of the policy makers. This was partly because the people present found it difficult to reach a consensus, and partly because the participants did not feel able to reflect the views of high-level policy makers. However, the Science journalists and communicators listed the following elements of the website as particularly useful to them:

- Searches – This provides a quick means of obtaining the required information in a relatively short time
- News and dossiers – From which communicators and journalists draw 'rare news' to report.
- Quick guides – because they provide a relatively synthesized information
- Journal articles –To which users can contribute articles so that their names also go on record for publishing
- Alerts – because these would keep the users vigilant and watchful of news and events.

4.1 Impacts of the website

Users reported that SciDev.net has contributed to their work by improving their knowledge and awareness of issues relating to science and technology; improving access to information; and reducing time spent searching for information. A University lecturer reported using the SciDev website searches and quick guides to prepare notes and teaching aids; research topics and as reference for students. The Science journalists and researchers/ scientists reported that the journal articles, that is, including the articles and "opinion pieces" in the dossiers are an inspiration for scientific writing.

5 The least useful parts of the SciDev web site and why

There was no consensus on the least useful parts of the SciDev website. However, it was recommended that a questionnaire be circulated via e-mail for participants to give their independent views.

6 Improvements that could be made to SciDev

The following is the information that participants would like SciDev to contain that is not currently on the website.

- Socio-economic research and development. e.g. on HIV/AIDS, nutrition, etc
- Natural resource management
- Health related issues like malaria especially with a more African perspective/focus so that it is sufficiently relevant to African readers.
- ICT and development
- A dossier for Social Scientists on science, technology and development.
- International trade in relation to science and technology.

- More regional and national specific information. Such information will be very useful to more frontline development workers.

The participants (both users and potential users) suggested the following improvements to the SciDev website.

- De cluttering the site by making more use of drop down menus to reduce on the details displayed at any one time
- Putting animations (moving pictures) e.g. every after 10 seconds (some felt that animations were not appropriate for a website such as SciDev.)
- Putting some colour themes in the background
- Providing language selection for the whole site and not only a few elements of it such as French and Spanish sections to be entirely in these languages. (This issue was raised because some participants observed that some articles are in languages they cant understand yet they could be of importance to them. So if these articles are entirely translated, they can then be understood and be used instead of translating sections of the articles).languages.
- Book marking and standard archiving so that users can access older articles
- Advertising the website more widely, by encouraging commonly used websites to provide links to SciDev, commercial adverts, media adverts and putting notices in target organisations such as universities, research stations and development programmes.
- Website information should also target policy makers directly e.g. parliament, Uganda National Council of Science, etc.
- Increase interaction between regional and national SciDev users by introducing and facilitating networks, country chapters, chart forums and public discussion forums
- Placing the search facility to the top right hand side on of the home page.
- Fitting all pages' content on one page to avoid people having to scroll up and down in order to view the whole content on a page.

Participants cited the following websites as examples that SciDev can use to improve:

- www.worldbank.org
- www.fao.org
- International Engineering Consortium – USAID website
- American Association for advancement of scientific development (www.aaas.org)

7 The value of the "dossiers" and how they could be improved

Most participants understood what a dossier is and the users were aware of the different elements of SciDev's dossiers. The science journalists and communicators used the dossiers as sources of "rare news". They often scanned through the elements of the dossiers on potentially interesting information to get information that can not be easily obtained from other sources. The views of policy makers were captured through government officials present. One such participant in the first workshop advised that his experience with working with policy analysts is that they occasionally used dossiers indirectly through asking junior officers to research information on their behalf. The information is often used for preparing briefs or reports. The conclusion of the discussion was that including more region and country specific information and policy issues would greatly improve the use of dossiers.

8 Other services that could be provided by SciDev

More users were aware of other services offered by SciDev in the second workshop than in the first. In particular, they mentioned that they were aware of information on grants and capacity building events. One person participated in HIV/AIDS reporting workshop that was held in April 2003. The participants' recommendation was to publicise these other services more, to design trainings to cover national and regional issues so as to be more relevant to local needs. Other trainings proposed include scientific writing and use of ICTs.

9 SciDev as a Network

The Participants (Users) felt that they were part of the SciDev network because of the regular e-mail updates and news alerts and SciDev's effort to involve them in evaluating their services through the focus group discussions

But the communication and interaction between local SciDev users is weak and can be improved by the creating a regional platform/ a local Users' SciDev.Net Uganda Chapter. The committee, which they proceeded to constitute during the second workshop, should include the following responsibilities:

- Promotion/publicity and reporting;
- Research / Science communication;
- Fundraising;
- Capacity building in science communication; and
- Executive Member.

They emphasised that this was their own initiative that did not need external funding from SciDev. Participants in the second workshop reported that they are members of professional groups, which are connected by newsletters or electronic communication such as the Community Content Creation (C3) Net, Gender and Diversity, Crop Bio-technology, Aids Alliance and Ugabytes.

Table 1: List of Participants for the 13th July Focus Group Discussion

No	Name	Occupation	Place of Work	User/ Potential User	E-mail Address
1	Nicholas Ddumba Katumba	Solution Engineering Executive	Uganda Telecom	Potential User	Nicolas.Dumba@utl.co.ug
2	Amelu Ejalu		I-Network Coordinator/ICT Mgt Consultant	Potential User	aejalu@sacrod.com
3	Ken Wasswa	Asst.Coodinator	Rural Dev. Initiative	Potential User	Kenwasswa@mail.com
4	James Okoth	National Project Coordinator FFS Programme	FAO	Potential User	James.Okoth@fao.org
5	Denis Okwar	Compliance Officer	ACDI/VOCA	Potential User	dokwar-pl480@acdivocaug.org
6	Felix Bnan Oketcho	Business Reporter	Daily Monitor	Potential User	foketcho@yahoo.com
7	Davis Weddi	Internet Editor	The New Vision	User	dweddi@newvision.co.ug
8	Chris Odubi	IT Assistant	Uganda Business Information Network/FECH-Uganda (Nebbi District)	User	Chris-Odubi@yahoo.co.uk
9	Joshua Abens Kayiwa	Data Manager	Joint Clinical Research Centre	User	Jkayiwa@jesc.co.ug
10	Fredrick Kintu	Programme Manager	Information Society Foundation (ISF)	User	fkintu@isf.or.ug
11	Kwizera Musaba H.	Lecturer	Makerere University	User	kwisaba@agric.mak.ac.ug
12	Rukara Julius	Agricultural Inspector	Ministry of Agriculture Fisheries and Animal Industry	User	

Annex 10. Report of Ecuadorian Focus Groups

Reports of Meetings held at Quito and Guayaquil, Ecuador

by

María del Carmen Cevallos

Date: August 18, 2006

Abstract

All participants in Quito and Guayaquil think that Scidev.Net portal is useful for their work, because it offers access to high quality specialized scientific magazines, such as Nature and Science. A few participants in Quito believe that aspect of the web site should be improved to make it more attractive; in particular it currently contains too much information. In the Spanish section that is in English, they think it should all be in Spanish, as many people do not read English. However, in Guayaquil all participants stated they like its aspect; most of them found its aspect was agreeable, informative, clear, fresh, attractive and interesting in the first page on entering. Most participants of both groups did not know about many of the other services offered by SciDev. They would like training workshops be promoted on a permanent basis and would like them extended to scientists, for example “How to communicate with journalists”.

Most of participants stated that news and “dossiers” to be the most interesting pursuant to the specific work they perform. For journalists, for instance, the news is the most important element of the site, because “news let them know scientific advances in Latin America”; while for analysts and investigators, “dossiers” are said to be the most useful, because of the depth of the analysis. However, most of participants many of the portal’s services are under-used, because all profitable aspects are not known. They believe that a promotional strategy is required to encourage a better use of the information. Real impact of the portal on people’s life was not known.

Half of researchers participating think that the portal should include sections that allow users to participate through discussions, forums, and opinions and to enable them to get in touch with specialists for a direct contact. They feel that at opening a site and finding an interesting subject they would like to have a way to communicate inline with the authors, for example, and participating in virtual forums and express their ideas. Most of both groups stressed in the need of self-identifying and publishing a great deal of information that exists about their own country. They appreciate the information about other countries, but they also want the scientific information that originates in Ecuador.

One interesting contribution of most participants to improving the impact of SciDev, was the suggestion to create Editorial Committees in each country. They believe it will help evaluate information to be published. They also suggest opening a contacts directory for scientists, researchers, analysts related to C&T to generate information. Universities and research centers have shown their interest would provide support for this function. In addition all participants in

Quito and Guayaquil also suggested “implementing a marketing strategy in order to widely promote the portal and its services”. In addition, they suggest implementing audience segments so that a large number of subscribers register and use the information as a source for their work. For journalists, the portal becomes “a source of information”, and for researchers and analysts “it allows them knowing a topic more deeply on other countries advancements”.

1. Background

Both in Quito and Guayaquil, the idea was to organize focal groups including both users (from a list provided by The Policy Practice) and non-users selected by the following categories: investigators, scientists, journalists and policy analysts. It was decided to invite half users and non users in each category. The invitations were sent out two weeks before the meetings so that participants reserved their time for the meeting. In Quito, the focal group took place on July 14 2006, in the Río Amazonas Hotel between 10 am and 15H00 pm. During the meeting, the portal was connected to the Internet so that it could be reviewed during discussions. In Guayaquil, the focal group took place on July 18 2006, in the Continental Hotel, and followed the same schedule. The portal was recorded on a CD that could also be viewed.

In the case of users and nonusers who were not able to attend, despite having confirmed their participation, a questionnaire was sent to them via email. In addition separate personal interviews were conducted with entrepreneurs and policy analysts.

The leader of the focal group introduced herself and explained the purpose of the meeting, and requested each participant to introduce themselves. After presentation of the portal, a questionnaire was administered and participants’ opinions sought. The rapporteur noted the most relevant ideas and an audio recording was made for information support. At the end of each meeting, a lunch was offered to participants.

2. Participant Characteristics

	Meeting participants		Personal interviews	
	Users	Non users	Users	Non users
Journalists	1	5		3
Researchers	5	3	2	
Science administrators		4		
Entrepreneurs		1	1	2
NGOs		1		
Policy analysts				2

All participants were very keen to participate in the meeting. Each focal group included journalists from press, tv, radio mass media, as well as news agencies, magazines and investigators of different areas as well as entrepreneurs, science administration officials, policy analysts and technicians working in diverse NGOs. Experience of running focus groups in Ecuador suggested that time is an important limitation for busy participants. So it was decided to hold one single meeting in each city. Those that were not able to attend the meeting were interviewed in their job sites and others received the questionnaire via e-mail.

All participants are linked to science and technology areas from different viewpoints; hence their opinion is representative of their relevant segments. Participants showed a great willingness to provide their opinions on the portal.

Most of the participants involved in research belong to universities where they perform their activities, some of them as directors of research centers or directors of research projects and also as members of the teaching staff. The participants who were journalists provide scientific journalism in magazines, news agencies, and print media, and they write on the work of NGOs, the environment and research on communication. The analysts undertake consultant activities, both in the university sector and private enterprises.

Participants that are SciDev users obviously knew the site well; however, the site seemed to be under used due to the great amount of information that can be obtained from other sources. In fact, even the potential users knew of SciDev and when they received the invitation, they checked the website in order to prepare themselves for the discussions in the meeting. Most of them remarked on the lack of publicity about the SciDev site as the likely main reason for more people not using the site. This is why they suggest sending information about the site to different users in groups, that is to say, researchers, university professors, analysts, leaders, etc.

3. Overall Opinions on the SciDev.net site

In both cities, most of SciDev users stated the portal has a great amount of scientific “communication”. In Quito, most of readers stated the portal had “too many elements”, in Spanish and English which hinders surfing. Some journalists suggest a more effective division into different topics to make access to information easier. One nonuser journalist suggested that www.webyawards.com provided useful guidelines for better website design, because website design was a good element to render it attractive, considering contests winner websites are placed there.

Several participants stated that when they visited the site, they were not able to see graphics and photographs and that several times access took too much time. Most of journalists in both meetings emphasized that “the Spanish website should be entirely in Spanish because it is difficult to surf when there are several parts in English”, thus most of them do not speak English. In the Guayaquil meeting, all participants stated that the website design was acceptable. “The design is attractive, informative, clear, fresh and interesting on entering the website”. They found no trouble when accessing the site; all stated that during work hours becomes difficult because “it is possible there are many users that are accessing the page at the same time”. They also think internet connection is limited in their work sites, so access becomes difficult.

Prospective users in Guayaquil, especially researchers, would like more scientific documents to be included. It was explained by the focus group leader that the website is exclusively devoted to scientific communication, and for this reason referred materials are not on the site. The researchers also felt that a facility should be added to the site to enable more sharing to take place for scientific projects and network connection users of virtual libraries to share the papers they are working with. Most of them think that the site’s main page “should show mission and vision of SciDev”, because it would be a way of learning the portal policy.

Users visiting the website state they would like to use the SciDev website to share events such as “IFS invitations that are highly appreciated by researchers but are not well publicized. From a users’ viewpoint, they think that the information on the web site is interesting, but at the same time, they feel it does not adequately reflect Latin American information. For example, they think research on Ecuador or in other Latin American countries is more important to them than work in Europe. However, they stressed the need for SciDev managers to improve the balance of the material on the site to better reflect the reality of the Latin American experience in a better way, and thereby to increase the flow of information from a more diverse range of countries.

4. The most useful parts of SciDev and its impact

Scientific journalists consider that SciDev are useful, because it informs them about events in Latin America and other continents and are a useful source of information for their media.

Policy analysts appreciate dossiers because they treat specific subjects in depth. They would like more information on science policies, technology and innovation in order to make decisions in particular countries. They have also stated that knowing what happens in other countries on a given topic would be very useful for Ecuador especially to make decisions and know how policies are managed in other countries. Evidently, the usefulness varies according to different activities in each group. However, all of the focus groups found it difficult to provide evidence regarding the impact. They felt that the existence of a portal as an information source "does not necessarily assure impact". Impacts may well occur but will depend on which people visit the site and how they use the information it contains.

5. SciDev's least useful parts and the reasons for this

Most scientific journalists agreed that dossiers are interesting and provide high quality information, even though they do not use it for their work. However they believe that, more information organization is necessary for the website becomes friendlier. "Information should take as something practical, where knowledge can be applied", that is information non included in the portal should be included.

Policy analysts also confirmed from their viewpoint the site does not contain less useful sections. However, while they are aware that the information comes from several countries, they would like a relevant space devoted to information from Ecuador. In general, both groups of participants believe there are no less useful sections in the website.

6. How SciDev can be improved

Journalists agreed that the contents should be organized under a number of different subjects, such as medicine, natural sciences, volcanology, etc. In the same way, some of them stated that the depth of the analysis should be determined in relation to the specific audience being addressed. Considering this website is open to the public, several sections can be deep and others less deep.

Some journalists believe that audio and video devices should be incorporated into the site, they are important to attract users, and particularly journalists, as such media will allow them to understand the issues better and they can use it directly as additional information sources. Several journalists cited the Radio Nacional de España website which contains this type of output.

They believe that more links should be included. They request that information should be included that allow them "to see how such knowledge is applied in

practice". Information of this type can become a point of reference as a way to when used by the media.

Most policy analysts consider that links should be included to provide bibliographic references on each themes being reviewed, or in those items that they want to download from the website, especially dossiers. They also think "there is a need for space on the web site that enables them to contribute their own comments about the subject". They would also like to be able to download scientific documents in PDF format regarding different and interesting subjects to download and "in order to get quick and efficient access to interesting information".

Most of participants, either users and nonusers stated the need to include technology information. They stated having reviewed the portal and "said information was not found and it is very important" in order to apply knowledge so that the general public can better understand the science role in life.

7. The value of "dossier" and how to improve them

For journalists, the dossiers are highly valued because of the depth of their treatment and particularly because of diversity of viewpoints on the same subject. They regard dossiers as a highly reliable source of information that can be used to publish in their own media in relation to local circumstances. Some journalists believe that subjects and concrete examples that are relevant to Latin America, such as health, volcanology, and weather change among others, in order to encourage interest by the public in Ecuador.

In the specific case of Ecuador, they believe the volcanoes, for example would be a particularly useful topic of a dossier. They explained that an eruption of the Tungurahua volcano is currently occurring, which is causing several negative consequences in villages near the volcano, which has important social and economic impacts. Another example being cited is the "Child Phenomenon"; "the melting of glaciers" due to climate change that are directly affecting the local population because water sources have decreased, floods, call for a wider coverage and diversification of subjects pursuant to specific conditions and needs that sometimes are common".

In order to improve the dossiers they believe that "they should have a more educative focus with information about avoiding and relieving the social, health and environmental impacts caused by natural phenomena. Of course, they all agreed that health is a subject close to people that is why priority should be given to this topic. They think that in spite no immediate consequences have occurred in Latin America, such as the "bird flue", information should be available to take action. All participants think dossiers should not be replaced by health information solely because they found that "it is important to communicate them to the general population and to provide decision makers in the country with precise and reliable information".

8. Other services provided by SciDev

Most participants did not know about the workshops, lectures and support material provided by SciDev. They believe that it is very important to provide a permanent training service for journalists on how to treat scientific information.
Researchers and analysts stated “relationship between journalists and scientists should be treated as a training service. Most of researchers state journalists should be trained through updating events that are not only theoretical but also practical. For example it is believed that researchers and scientists should be present in workshops in order to know each sector view, concerns and worries. All of them stated that “if known how to manage the relationship journalist-scientist, the journalists’ work will be more professional and errors and misunderstandings will be avoided when sharing scientific information”, that have bothered scientists in several times.

All researchers have expressed the interest to have access to training events in order to improve their communication with the public. For that purpose, they are ready to be trained on ways to communicate science and to their acceptance by the public. Using technical language is seen as a barrier “we are willing to be trained in that theme” –they added.

9. What other services can be offered by SciDev?

Most of researchers stated that several options, such as forums and discussion groups, should be incorporated into the site in order to facilitate the exchange of information with people in different countries on common subjects. In addition, they have suggested that in order to generate more local information, an office should be opened in each country to collect information. This might be achieved through a mapping exercise to generate lists of specialist contacts so that a wide range of useful and first hand information can be obtained.

They would also like to have information on “how to get in touch with specialists in each subject” in order to create communication processes, consultation and information interchange.

Half of the participants stated that “the SciDev main website should be maintained as a cover in case sites are created for each country”, another suggestion frequently proposed, should allow maintaining an image of unity in the portal. Journalists and researchers stressed the need to seek information in each country and their opinion would be validated on the creation of Editorial Committees to generate information, evaluate it and place in the portal.

10. SciDev as a Network

Most of participants felt that in order for scidev.net to become more effective and to achieve more beneficial impacts of scientific information in their relevant jobs, a validation Editorial Committee should be appointed in each country to select what should be published. Such a committee would ensure reliability and, additionally, would broaden sharing of scientific information" Researchers criticize a lot when setting their opinion, they feel that "all scientific information should pass a revision, evaluation and validation processes to avoid errors.

Most of people participating in the focal group were very interested in cooperating on this task. They stated that, "we are interested in generating more local scientific information and welcome important, useful contributions from other countries". They feel that Ecuador should also contribute as well as other countries from Latin America, "we know differences between Latin American counties, so it becomes necessary that Editorial Committees are in place to evaluate information". Most of them feel that "there are countries that are relevant in the Latin American context, such as Brazil whose information is more abundant. They explain that "Brazil is a very big country almost equivalent to all Latin America area, and that its scientific-technologic development is quite different in comparison with ours".

Most participants think that working in a network is very important, mainly for scientific divulgation purposes. They add "there works and results from relevant researches that are known for lack of spreading". Researchers also stated that "it is partially their error for not generating information, because several times they do not know how to do it; they do not know to approach mass media" and they think that SciDev "is a chance to link and be communicated". Most of journalists stated that "network task is a current essential need for communication, share information and cause better impact regarding coverage and usefulness of information addressed to different publics".

All participants think that "important information for each of us should be taken into account, which is not necessarily important for all, the same occurs in countries". They stated that "a network can play an important role for the work of scientific journalists at it becomes a proprietary source of information for its work", "because it would allow sharing information among journalists, journalists and researchers". Most of them stated that to reach this purpose, the page should be capable to impact the user, "so it becomes the main searcher, in a need, for example Google

Most of participants feel that SciDev is very popular in Ecuador; they stated "that more promotion and publicity should be implemented on the site per 10-subscriber groups so it is more friendly and personalized and get the attention of potential users. They explain that "when the information is received to be sent to a great number of persons, the impact is different from if it is to be sent to a small group of persons or to an individual". Sending to a small group becomes closer, people feel involved. They believe e-mails should be sent with attractive ads reading "register it is free", for example, and mention benefits and fortresses offered by SciDev portal. Some participants suggest SciDev portal should be linked to yahoo and Google sites and contain "free sharing information"

List of Participants

Name	Occupation	Workplace	E-mail	Address
	QUITO			
Carmen del Rocío Echeverría Ruiz	Coordinator of the Ecuadorian, Science, Technology and Innovation Observatory. Implementation of the Observatory. Conduction of research surveys to generate indicators allowing making decisions at governmental level.	FUNDACYT	cechever@fundacyt.org.ec	Avdas. Patria 850 y 10 de Agosto. Quito. Tel: 2550553 2506540
Ramiro López	Physician, investigator; government official; Leader of the Science and Technology Investigation Process.	Ministry of Public Health	ramirolopezp@gmail.com	Buenos Aires 340 y Juan Larrea Tel. 2543598
Edmundo Estévez	Genetic physician; researcher; surveys and researches in genetics. Scientific releases on bioethics; Director of a Biomedicine Center of the University; University professor.	Faculty of Medicine. Central University of Ecuador	eestevez@cbm.uce.edu.ec	Sodiro N14-121 e Iquique Tel: 3228455
Ericsson López	Scientific research in Astronomy	Astronomic Observatory in Quito, EPN	ericsonl02@yahoo.com	Interior del Parque la Alameda, Avenida Gran Colombia s/n P. O. Box 17 01 165
Luis Lascano Lascano	Professor in Physics; researcher on materials for Physics.	Physics Department – EPN	llascano@server.epn.edu.ec;	Ladrón de Guevara E11-253. Quito
Darwin Leonardo Hernández Jaramillo	Coordinator on Natural Surrounding Management; coordination of conservation projects; training on environmental education; follow up and evaluation of projects.	OIKOS Corporation	dhernandez@oikos.org.ec	Luxemburgo N34-80 y Holanda. Quito.Tel: 2461595 / 2461596
Ivette	Journalist; Communication	Fundación Natura. Area	ipullas@fnatura.org.ec	Elia Liut N45-10 y El Telégrafo.

Susana Pullas Lucero	Coordinator for the Chemical Products and Special Wastes of the Fundación Natura Project; induction of technicians for the preparation of texts for technical and didactic material in order to disseminate information on environmental subjects for environmental quality as well as promoting the project image in the national and local environment where the project works.	on Environmental Quality, Project on Chemical Products and Special Wastes		Sector El Bosque PBX: 2272863 ext. 213 - Quito
María Isabel Cevallos Simancas	Journalist; Director of the CyT Agencies Project. Editorial planning with freelance journalist to prepare articles; analysis of the country's situation; contact with scientists and researchers; link with communication media; negotiation of covenants for the diffusion of information.	FUNDACYT	micevallos@fundacyt.org.ec	Av. Patria 850 y 10 de Agosto, Edif. Banco de Préstamos, piso 8.
Leissa Sánchez	Scientific journalist; reporter for Gestión magazine, circulating in the national territory; covers several sources; freelance journalist of FUNDACYT CyT News Agency.	MULTIPLICA	leisa.sanchez@multiplica.com.ec	
Héctor Chávez	Architect; private enterprise; preparation of technologic innovation projects in the housing sector through the use of appropriate technologies; specialist in intellectual property.		icaecua@interactive.net.ec	
Rosa Solórzano de Cervantes	Journalist; Press adviser of the Vice-president of the Republic. Adviser in divulgation and popularization policies in science; relationship with other communication media.	Vice-presidency of the Republic	rosa.solorzano@vicepresidencia.gov.ec	
MelissaArévalo	Biologist. Researcher on human genetics; several studies completed	Human Immuno-genetics Laboratory. Pontificia	nmarevalo1@yahoo.com	

	and others in process.	Universidad Católica del Ecuador		
Freddy Fuenmayor	Scientific journalist. Works for recovery of species in captivity; Director of a radio program on the environment.	Planeta Verdeazul	planetaverdeazul@yahoo.es	
Fabián Jaramillo	Engineer; researcher specialized in Info-pedagogy. Trainer in the use of new information technologies to elementary school and high school students.	Ciudad	infopedagogos@yahoo.com	
José Balarezo	Engineer; science administrator; evaluation of scientific research projects, follow up, monitoring.	FUNDACYT	javalrez@fundacyt.org.ec	San Salvador 290 y Pradera. Tel: 2504313
	GUAYAQUIL			
Telmo Fernández	Researcher physician; specialist in research of tropical diseases; active member of the Investigation Forum on Health in Ecuador (FORNISA); General Coordinator of the forum. University professor.	Universidad de Guayaquil	telmo1312@hotmail.com	Urdaneta 1401 y García Moreno Tel: 2291840
Paul Carrión	Researcher geologist engineer; Director of the Science and Technology Research center (CICYT). Negotiation of research projects manager, CyT fairs, release of scientific books and articles.	ESPOL	pcarrion@goliat.espol.edu.ec	Campus “Gustavo Galindo Velasco”. Prosperita. Km. 30.5, vía Perimetral. Tel: 2269269
Juan Carlos Ruiz	Physician; researcher specialized in cancer.	SOLCA. Ecuadorian Society to Fight Cancer.	jcruizc@hotmail.com	Av. Pedro Menéndez Gilbert, diagonal al hospital Lorenzo Ponce. Tel: 2288088
Liena Shinkarenko	Health researcher; university professor.	SOLCA. Ecuadorian Society to Fight Cancer.	liena02@hotmail.com	Av. Pedro Menéndez Gilbert, diagonal al hospital Lorenzo Ponce. Tel: 2288088
Glenda	Scientific journalist; reporter;	Red Tele Sistema Canal	gbastidas@rts.com.ec	Juan Tanca Marengo, Kim. 4.5

Bastidas	producer of Science and Technology segment for the main tv news program; national covering channel; emission of a journalist report per week (Wednesday) on results of scientific research and technologic innovation projects.	Nacional.		
Pedro López	Scientific journalist. Covering and reporting of the Technology site published on Sundays in El Universo Journal (journal with the highest circulation in the country).	Diario El Universo	domingo@eluniverso.com	Av. Domingo Comin y Ernesto Albán.
Sergio Flores	Engineer; Ex-Rector of the Politecnic School of the Litoral (ESPOL); private entrepreneur; specialist in CyT policies; researcher and university professor.	ECUTEL ESPOL	sflores@goliat.espol.edu.ec	Campus “Gustavo Galindo Velasco”. Prosperita. Km. 30.5, vía Perimetral. Tel: 2269269
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Azucena Acosta Correa	Responsible of Solca Website; Administrative Assistance of Systems Department.	Solca (Ecuadorian Society to Fight Cancer)	aacosta@solca.med.ec	Avenida Pedro Menéndez Gilbert P. O. Box 3623 09821340
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Jorge Tola	Engineer; science manager; management of research projects; raising if funds for research. Lobby politician. Founder member of Fundacyt.	FUNDACYT President controlling private sector	tolaj@gye.satnet.net	Av. El Ejército 303 entre Alejo Lascano y Padre Solano, Planta Baja
Lucy Peralta	Journalist; National director of news in a local tv channel; programming of 3 news programs in a daily base; journalistic plan. Analysis of the national reality, including science and technology. Weekly program for two consecutive years.	Red Tele Sistema. Canal de Televisión	rperalta@rts.com.ec	Juan Tanca Marengo, Kim. 4.5

Annex 11. Report of Chinese Focus Group

Report on the Focus Group held on 1 September 2006 at the Chinese Hall of Science and Technology by Hepeng Jia, regional coordinator for SciDev.Net.

Executive summary:

What participants like and do not like about the services offered by SciDev,

What participants like

- A window linking China and the world, especially other developing nations
- Wide coverage
- Specific role to inform various participants about science communications
- Unique and up-to-date information
- Information rich website
- The web frame and structure are attractive and easy to use
- The website pictures are very interesting and relevant.
- Science communication training offered by SciDev.Net is highly valuable
- Language easy to understand

What participants do not like

- Chinese information is insufficient
- Information about China is insufficient, and lacks China-specific topics such as TCM
- There are no specific communications products (meaning contents) designed to meet the specific needs of subgroups of the target audience (scientists, policymakers/researchers, journalists)
- The contents of the site is not sufficiently academic and may not attract scientists
- News content insufficient, especially for a website
- Website and its valuable information are not widely publicized so that non-users do not know this information.
- Insufficient interaction between readers and editors
- Lacking corporate information
- Website speed is slower than many domestic websites
- The Chinese email alerts are often illegible and contain a jumble of code.

What impact do the participants believe the web site has had on those that use it

- Useful to enable readers to obtain specific information, especially about other developing countries
- The website and SciDev.Net's activities are an important tool to

communicate science
- SciDev.Net dossiers, especially policy briefs, are important sources of development-related science policies

Suggestions on the ways in which the services of SciDev might be improved in future.

- It was recommended to increase the Chinese contents, especially content that is intended for policymakers and journalists who cannot easily read in English
- Increase the availability of the website by including more mutual links to local organisations and commercial websites.
- Increase website publicity through the production and distribution of brochures to institutions such as universities, international and national research programmes, NGOs, and research companies and at various meetings
- Make the contents more diversified, covering not only topics, but also scientific disciplines. Such classifications can be run in parallel and the contents in the different items can be repeated.
- Link valuable contents, such as policy briefs in dossiers, directly to other websites or make them easier to find by search engines such as google and baidu.com.
- Increase SciDev.Net cooperation and partnerships with local organisations, especially government organisations.
- Create items to help scientific writers to report about specific hot topics, such as the latest scientific discoveries or controversial issues

Any other key or unexpected findings

- The source of information such as articles to put on the website as this was not clear to the participants. For people trying to quote SciDev.Net contents, lack of source references make them seem less reliable, at least at first sight.
- Topics, headlines and expected target users are appreciated by the focus group participants, including editors of very popular commercial websites. Originally, it had been thought that SciDev.Net titles (at least when they are in Chinese) are less appealing, but our users think the current forms are okay and we need only to expand contents.
- Dossiers are being used by science policy analysts but they have not been used as major references when the latter try to write policy-related papers and/or reports

Focus group facilitator's impression:

The role of SciDev.Net, both its website and its activities, are highly appreciated by focus group participants who think such activities have been previously lacking in China. However, the use of SciDev.Net, even among long-time users, is relatively limited, perhaps because the contents of the website's content is yet sufficiently relevant to each specific group of readers'/users' needs.

Section 1: Background

Hepeng Jia on behalf of The Policy Practice which is implementing the SciDev.Net evaluation conducted a one day workshop geared towards evaluating the services of SciDev.Net with view of determining the opinions of users and potential users of the SciDev web site. The specific objectives of the workshop were:

a. Determining what users like and do not like about the services offered by SciDev,
b. Finding out what impact the web site has had on those that use it, and
c. Discussing ways in which the services of the SciDev might be improved in future how the services of SciDev might be improved in future.

The workshop was held at the Chinese Hall of Science and Technology in Beijing on 1 September 2006 and lasted for 5.5 hours. The twenty-two participants for the workshop were selected randomly from two categories of users and potential users of the SciDev.Net. A list of 180 users was provided by the Policy Practice, who can be clearly identified to be in Beijing. The selection of 10 participants was mainly based on this list but also on the full name lists of SciDev.Net users provided by Jemima Tonks.

A sample of 11 non/potential users is obtained randomly. It was intended that should have been 10 people in each subgroup. In the selection process, however, in order to abide by the participant categories suggested by Policy Practice (two scientists, two science journalists or communicators, three government officials or S&T policy advisors and three “others” including aid agencies, NGO, business, students for each subgroup), 20 candidates were contacted by emails or telephones for each subgroup (user/non-users) so that there would be right proportion of participants. However, as the result of more-than-expected response, the non/potential subgroup has one additional participant. However, if we include the SciDev.Net translator – a registered user based outside Beijing – who tried to answer the focus group questions by emails, and then the number of participants in the two subgroups is the same.

In the organization process, foreigners (in China) have not been considered because of the language barrier.

The workshop was organized into three sessions:
Session 1 was for introductions and to enable participants to get to know each as users and non-users of SciDev, who they are, where they work and type of work they do. Annex 1 provides details about the participants’ categories in a plenary session. Thereafter, the background, purpose, and outputs expected from the meeting were introduced to the participants and discussed, key elements of SciDev clarified and the tasks for the day explained to the participants. The participants thereafter split into two categories of users and potential users and discussed the rest of the issues in their respective categories.

Section 2: Characteristics of the Participants

The 22 participants included universities professors both in science and policy researchers at the CAS (Chinese Academy of Sciences), government officials (one for each subgroup respectively), policy researchers at institutes, corporate scientists, website and newspaper editors, and graduate students in science and science communication.

As a whole, the participants are top ranked in their categories. They have included very famous scientists in China, leading policy researchers and major science communication researchers in China. The gathering of the top ranked people indicates the high value they placed on SciDev.Net in China.

Another common feature of the participants was that they are supportive of science communication, which has not been shared, at least in practice, by all scientists, science officials, and policy researchers. In China, scientists have no obligation to communicate science to people outside their circle. Therefore, many scientists who are not enthusiastic about science communication would not participate in the focus group held by SciDev.Net, because the website/organisation is primarily aimed at communicating to a wider (more popular) audience

One question sheet was sent to the major official in charge of science popularisation but no response has yet been received. Another question sheet was sent to a translator of SciDev.Net, based in Jinan, Shandong Province, who is a registered user. His answers have been merged into this survey report.

Annex 1 provides a list of the participants and highlights who they are, where they work and type of work they do, and how much they know about the web site..

Section 3: Overall Impressions of SciDev

As regards to the overall impression of SciDev.Net, both the users and non-users regard this as an important window linking China to the rest of the world, and especially to other developing nations. None of the participants, either users or non-users, know of any other website containing similar information, especially in Chinese.

They also think the website covered a wide range of issues in science and science-related fields and its information is rich, as compared with journals and other non-media website. But when compared with other media, both non-journalists and journalists think that SciDev.Net's contents are much less extensive.

Both SciDev.Net users and non users recognize the important roles of SciDev.Net in informing and equipping various participants of science communications with skills and up-to-date information, especially the information in hot international science topics related to development. However,

they tended to stress this role at the cost of overlooking other roles that SciDev.Net seeks to perform, such as briefing policymakers. They only became aware of this other role of SciDev.Net after it was drawn to their attention by the focus group moderators.

All of the participants, including media and non-media, think SciDev.Net has very up-to-date information. But they – both users and non-users -- are not clearly aware about the key focus of SciDev.Net, namely relating science to development. As a result, many criticised SciDev.Net for not reporting China's advances in basic sciences and other areas, such as space sciences.

It is also suggested that SciDev.Net should open a special theme (or section) on TCM (traditional Chinese medicine). Although SciDev.Net has already had a dossier on indigenous knowledge, it does not adequately cover the TCM. China has given TCM high official recognition and huge formal research resources, much more than any other country. As a result, TCM in China has the combined features of both traditional herbal medicine and the official, scientifically recognized drugs.

Most participants, including the professional website editor, thought that the web frame and structure look good and are easy to use. None of them think that the contents are too congested, as suggested elsewhere.

All participants, including those having participated in SciDev.Net's science communication training workshops and those who only recently learned of these activities at the focus group, were highly appreciative of this service and work. None of them were aware of similar activities in China before.

Participants in the plenary meeting thought that SciDev.Net's information on (and from) China was insufficient, the classification of contents should be more diversified, not only covering current topics like climate change, agricultural biotech and so on, but also covering scientific disciplines such space science, earth science, life science and physics science). They also thought that the interaction between website editors and users/readers should be improved.

The sub-group of non-users had more negative comments (perhaps because the coordinator, me, was not chairing this subgroup). Generally, they made several key points:

1. It could be very difficult for SciDev.Net, as a website-based media, to combine the interests and needs of different groups of target users, such as journalists, scientists, and policy researchers.
2. The contents of SciDev.Net are aimed at a middle level between academics and the public. They felt that scientists would not read it because it is insufficiently professional, and the average public would not read it because it would be too scientific for them.
3. Few topics in advanced sciences in developing countries, such as China's lunar exploration project, have been covered by SciDev.Net. This means that it does not adequately report the full range of scientific developments in developing countries.

4. If SciDev.Net is to serve developing countries, then local languages should be used rather than English. The contents should be reported first in local languages and then only selective ones should be translated into English.

Several recommendations have been made both in the plenary meeting and the subgroup meeting, which have been listed in the executive summary of this report.

Section 4: The most useful parts of the SciDev web site and its impact

It is very difficult to effectively evaluate this aspect of SciDev as the site was not familiar to the non-users and users did not use the site frequently. However, both agree that SciDev.Net news and other news-related contents, such as features and opinions, open up a new angle for them to observe the world of science. Some participants felt that opinion articles offered them fresh thinking, but they do not often read them.

Following the introduction from the moderator, all participants, including media and non-media, and users and non-users, felt that the E-guide for science communication and dossiers are very important.

Because most of the participants who use SciDev.Net read it in Chinese, they were not aware of the search function which cannot be used in Chinese.

In addition to the focus group participants, the SciDev.Net translator reflected that he only read the news/feature sections of the website.

A list of useful part of SciDev.Net is thus described below:

- News and features – because as journalists, their work is to report news and SciDev.Net provides a quick source of 'rare news' that other channels seldom offer.
- Opinions – in most cases they were not read by users, but those that do still think this part very inspiring.
- Dossiers were highly valued by all participants. But only policy researchers used this section regularly. Journalists reflected that they would like to use them, but often find no time to read them. Scientists said they only read dossiers in areas outside their major area of specialism.
- E-guide – there were highly valued by all participants, but only the journalists have been using it.

Among the users, the policy researchers have used the dossiers more frequently than others. But they feel that the contents of the dossiers are not directly relevant to China. SciDev.Net dossiers lack the descriptions of the policies of individual countries to cope with issues related to the dossiers. Users feel that the dossiers are too international, lacking policies in individual

countries. They suggested that the dossiers should contain more basic facts on the policies of individual countries on selected issues related to development. A policy researcher, who is the long-time user of SciDev.Net, would like to read more comment from foreigners on China's concrete science policies, especially the bold policies to encourage innovation that have recently been released.

Section 5: The least useful parts of the SciDev web site and why

It is difficult to encourage people to say which parts of the website they found least useful. But results were obtained by asking whether participants use certain specific parts of the site, and whether potential users plan to use them.

As a result of this approach it was found that quick guides were the least valuable section. The reason is that professional scientists from universities and CAS have their own professional academic websites or information channel. Given the fact that all research-related participants come from major universities and CAS where the libraries have established comprehensive databases (in this aspect, China is quite different to typical developing countries), it is reasonable to expect such low use of the quick guide. However it may be that grassroots researchers will find this part very helpful, but the focus group has did not contain such people.

Perhaps for similar reasons, natural science participants said they do not use nor will use the full-text Science or Nature papers available through SciDev.Net. They are able to obtain full access to all the papers in these two journals easily when they want to read them. Another reason for this might be that the four natural science-related participants (two life scientists on cancer drug development, one space scientist and one seismologist) do not work on issues covered by SciDev.Net.

The least used parts of SciDev.Net also includes the service information section (events, jobs, and grants), partly because we do not offer Chinese in this section, partly because they are far removed from the needs of Chinese participants (for example, jobs through SciDev.Net are mainly international aid organisations or NGOs, which are not attractive to Chinese participants).

Our translator also point out that book reviews are also little used.

Section 6: Improvements that could be made to SciDev *(one page)*

Both users and non users recommended increasing the Chinese language content of the site, especially the content intended for policymakers and journalists who cannot easily read in English. The participants remarked that among the three key reader groups, only scientists can read easily in English.

Participants suggested classifying the contents of the site both in terms of topics and also in terms of scientific disciplines. For example, news on the website can

be classified as both indigenous knowledge, and another system of classification, such as, chemistry.

Participants, especially non-users, particularly want the website to report the newest high-tech development of developing countries. Non-users also think that the site has given more prominence to the negative reports about developing countries than more positive ones. It is also suggested that a mechanism be designed to ensure the website truly reflects the views and needs of developing countries about concrete issues, instead of merely reflecting the views and needs that the London editors believe will be of interest to developing countries.

Participants welcomed the idea of covering more health related issues. But they would like more reporting of medical practice instead of merely medical research, because there is a big gap between the two in the developing countries.

Participants understand the limits of what SciDev.Net can do with its limited resources. They suggested that more partnerships with local organisations might help remove these constraints. In particular they mentioned getting partners to post their information directly on SciDev.Net and joint efforts to undertake and pay for translations. They argued that the Regional coordinator of SciDev.Net should not work mainly as a reporter/editor, but rather he or she should be coordinating others' work and seeking to develop more partnerships.

Several suggestions on the promotion of the web site were proposed. These included increasing the availability of the website elsewhere by making more links to local organisations and commercial websites, increasing website publicity through production and distribution of brochures with institutions such as universities, and making valuable contents, such as policy briefs in dossiers, more frequently linked to other websites or make more accessible to search engines such as google.com and baidu.com.

All journalists, both users and non-users, agreed (some suggest and others agree) that SciDev.Net should work more as a tool to help science journalism. Its E-guide should not only be a collection of articles, but provide real-time guides to the reporting of specific hot topics, such as the newest scientific discovery or controversial issues, or the visit of important guys like Stephen Hawking. Such assistance could include the background of the news-making scientific events, and the names of authoritative scientists or institutes to contact. Assistance or mentoring would also be welcomed from experienced senior reporters who can be invited to comment on whether a certain article has been well or poorly done, and if so, how it might be improved.

Participants cited the following websites as examples that SciDev can use to improve the services it provides:

> Peking Univ professor Wu Guosheng's science communication center: http://www.csc.pku.edu.cn/
> China Red ribbon:

http://www.chain.net.cn/aidsenglish/index.htm

Section 7: The value of the "dossiers" and how they could be improved

Most suggestions on dossiers have been mentioned previously. In this section, the report will summarise some of the issues while adding more concrete points.

Policy researchers and government officials think dossiers, especially policy briefs, are important sources for understanding development-related science policies. In China, each major government department has at least one affiliated research body. Therefore, dossiers could THEORETICALLY be important references for policy researchers and through them, policymakers. But currently their existence is not sufficiently known to these institutions, and as they are not in Chinese they cannot be read.

Meanwhile, science communication researchers in China think that the dossiers, especially the policy briefs, can be very valuable as they offer comprehensive view about certain issues, instead of the one-sided and one-way information flow that is so common in the practice of China's science communication.

However, it was only policy researchers that used the dossiers. None of the other participants said they use dossiers [at all or often], suggesting that that the content, structure and relevance might need to be adjusted to increase their attractiveness to these audiences.

Suggestions (some have been mentioned above) for improving the dossiers were made, including:

1. Make the classification of contents more sophisticated, both in terms of topics, but also in terms of scientific disciplines. The material can be classified in a number of different ways in parallel and can be repeated in different parts of the site.

2. Make of the policy briefs in the dossiers can be linked directly to other websites or made more accessible to Internet search engines such as google and baidu.com..

3. Participants wanted the policy briefs to contain more in-depth analyses rather than stressing more up-to-dated but less incisive contents. To overcome the problem of policy briefs becoming out-date, they suggested that they should be supplemented by more recent news at the end of the policy briefs.

4. More local language (Chinese) policy briefs should be posted and they should be more locally relevant. More relevant topics might include some describing China's TCM. Participants suggested some of them

might not need to be in English at all but to contain only an English summary. SciDev.Net does not need to commission all policy briefs itself, but could post directly penetrating and informative journal review articles produced by others as policy briefs.

5. More local partnership can be used to develop locally relevant dossiers. For example, a Chinese dossier on TCM could include translations of the existing policy briefs on indigenous knowledge, and additional analysis on the relevance of these briefs to China's situation, Chinese policy briefs on certain topics of TCM and English summaries, and the comments by Westerners on TCM approaches.

Section 8: Other services provided by SciDev

All participants, including those having attended SciDev.Net's science journalism/communication training workshops and those who just learned of these activities at the focus group, were highly appreciative of this service and work. None of them have ever heard of similar activities in China before. The participating journalists hope that SciDev.Net can offer more of these services and spread the results from the workshop among non-workshop participants. The participants showed great interest when the learned that Hepeng Jia is editing a book resulting from SciDev.Net-UNESCO Beijing workshop.

The moderator indicated that SciDev.Net science communication workshops are intended not only for science journalists but also scientists. This immediately aroused the interests of the CAS PR official, who would like to cooperate with SciDev.Net to train its institute PR officers (CAS has more than 80 institutes).

Compared with some negative evaluation on the SciDev.Net website, it was striking that no one has any negative comments on the science communication workshops initialized by SciDev.Net in China.

However, most participants say they have not known in time about the previous science communication workshops by SciDev.Net and its future plans.

Section 9: SciDev as a Network

Neither users nor non-users felt that they were part of a network initiated by SciDev.Net. Participants from an environmental NGO considered that networking activities were rare in China's science community, because of people's self consciousness. It was suggested it would be very difficult for a foreign organisation such as SciDev.Net to promote any networking activities in

China's science and science communication societies. But participants did express their willingness to increase their cooperation and partnership with SciDev.Net.

List of participants

No.	Name	Occupation/ Place of Work/Type	Contact information
Non-user/potential users below			
1	Luchuan Ren	State Seismology Administration/scientist	renluchuan@sina.com
2	Weixin Jiao	Geographical professor, Peking Univ./scientist	jiao@pku.edu.cn
3	Yongqing Lei	Science editor, Sina.com.cn/journalist	yongqing@staff.sina.com.cn
4	Daqing Li	Senior reporter, S&T Daily/journalist	lidq@stdaily.com qlida@263.sina.com
5	Xiaomin Zhu	Inst. Of Science policy, CAS/policy researcher	zhuxm27@hotmail.com zhuxm@mail.casipm.ac.cn
6	Jinsong Jiang	Inst. Of Sci & Society, Tsinghua Univ./policy researcher	jsjiang@mail.tsinghua.edu.cn
7	Ping Liu	State Council, HIV Prevention Consulting Committee/govt official	liuping@chinaaids.cn
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9	Huilian Zhang	Project manager, Inst. of Environment And Development/ Others: NGO	zhanghl@ied.org.cn
10	Gong Cheng	PhD student, Peking Univ. / Others: student	victorchenggong@gmail.com
11	Bo Xu	Graduate student on climate change, CASS / Others: student	8610-85195711 13810712899
Registered user below			
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8	Yue Mei	Greenpeace China/Others: NGO	zhou.meiyue@cn.greenpeace.org
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No.	Name	Occupation/ Place of Work/Type	Contact information
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